

SOUTHERN AUTOMOTIVE JOURNAL

COVERS THE
SOUTHERN AND
THWESTERN STATES

PASS IT ON!

OWNER	<input type="checkbox"/>
GEN. MGR.	<input type="checkbox"/>
SERV. MGR.	<input type="checkbox"/>
PARTS MGR.	<input type="checkbox"/>
FOREMAN	<input type="checkbox"/>
SHOP	<input type="checkbox"/>

February, 1950



Perfect Circle GX
"Oil Stopper" Steel
Oil Ring, as seen in
NATIONAL PUBLICA-
TIONS by millions.

Seen by Millions--Used by Millions!

The Perfect Circle Sectional Steel "Oil Stopper" illustrated above has been seen by millions in national magazines. Like all Perfect Circle products, it is known and accepted by motor-wise car owners all over America.

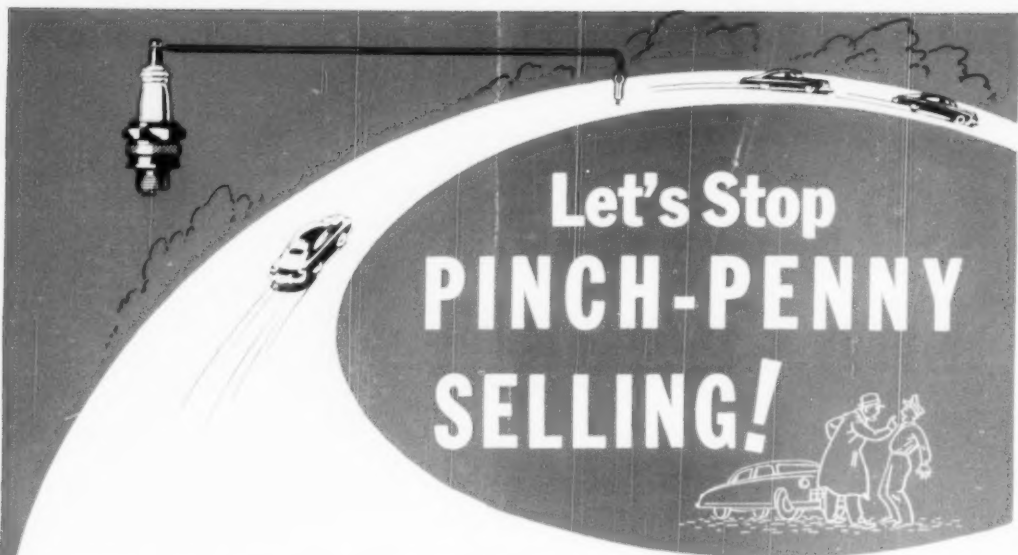
The "Oil Stopper" gives a "star" performance in even badly worn engines. It eliminates oil pumping, increases

power, saves gas and oil, and gives longer life to worn engines! No wonder Doctors of Motors actively express their preference for Perfect Circles by installing millions every year!

Let the "Oil Stopper" be your trouble shooter on all worn engine jobs. Ask for it in the Perfect Circle 500-5000 Series.

Perfect Circle

THE MOST HONORED NAME
IN PISTON RINGS



WHAT IS PINCH-PENNY SELLING?

Here's one example... to replace a set of spark plugs—and not replace the old ignition wires is pinch-penny selling. New spark plugs can't give peak performance through old wires. (see table at right).

When the customer comes back still having trouble, and you ask him to pay for new ignition wires, he balks—claims that if they were needed you should have replaced them in the first place. A customer always kicks about paying anything—no matter how little—for a “make-good” job. He refuses to accept your explanation that you were trying to save him money.

It's wrong to sell a man anything he doesn't really need. But it's just as wrong not to sell a customer what he *does* need to assure peak performance. Pinch penny selling gets you into trouble... costs you business... robs you of profits... loses customers. Therefore, never install new spark plugs without installing new ignition wires.

• The winner, the third and the sixth cars at the Indianapolis Race in 1949 were equipped with Crescent Wiry-Joe. They know the difference that good ignition wire makes.

DYNAMOMETER TESTS

Prove

NEW IGNITION WIRES MAKE BIG DIFFERENCE IN ENGINE PERFORMANCE

The following table gives results of dynamometer tests on a 1935 Oldsmobile before and after installation of a new set of Crescent 90-05 High Tension Ignition Wires.

	Old Wires	New Wires	Increase
1. Motor RPM	700	1000	42.75%
2. Torque	22	27	22.75%
3. MPH after full load	14	18	28.6%
4. Load applied at (MPH)	45	45	
5. Time required for breakdown from (4) to (3) above	20 sec.	45 sec.	125%

NOTE: No adjustment or replacement other than installation of new Crescent ignition wires were made to the car tested.



THE CRESCENT COMPANY, INC., Pawtucket, R. I.

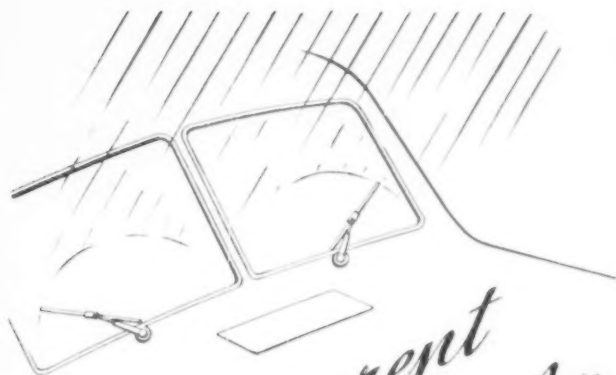
Check the wire and cable on every car!

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Volume 30

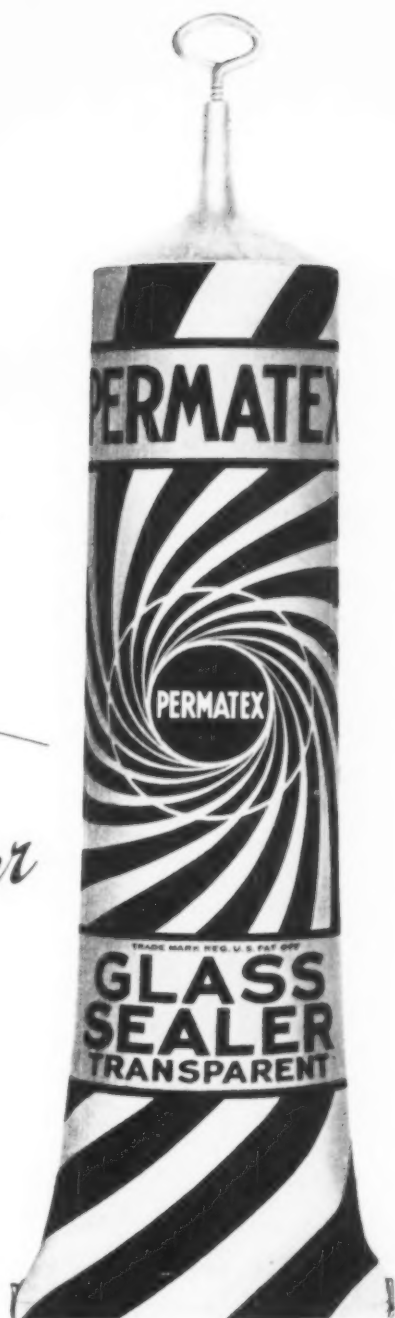
Number 2

SEAL OUT THE WEATHER



*Transparent
Windshield Sealer*

Makes windshields leak-
proof to rain or snow.
Always is crystal clear,
colorless and pliable.



PERMATEX COMPANY, INC., BROOKLYN 29, N. Y.

Only McCORD PIPES
HAVE **ALL THESE**
CONSTRUCTION FEATURES



Cold Rolled Electrically Welded

McCord pipes are made from cold rolled electrically welded steel tubing, the finest type of tubing available for exhaust and tail pipe construction.



Even Wall Thickness

Even wall thickness is an important feature of McCord pipes because the resistance to rust and corrosion is equal throughout the length of the pipe.



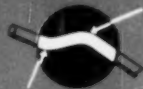
Easy to Install

Because McCord exhaust and tail pipes are made to blue print specifications and to close tolerances installation is easy, requiring less time.



Individually Engineered to Fit

McCord pipes are Individually Engineered to fit one model of car or truck. The correct length and the proper radius on all bends.



No Crimped Bends or Cracks

There are no crimps, corrugations, or cracks in McCord bends that would restrict the free flow of gas and collect deposits that would start corrosion.



Smooth Finish Retards Corrosion

The smooth, hard, oil finish of McCord mufflers not only retards corrosion, but is an indication of a quality product.

SELL McCORD EXHAUST and TAIL PIPES

The Replacement Pipe that's **SPECIFICALLY ENGINEERED** to fit Every Make of Car

New McCord pipes should be installed every time a muffler is replaced. Check the exhaust and tail pipes for rust holes, thin spots, also for places where the pipe may have been flattened retarding the flow of gas.

McCORD CORPORATION
DETROIT 11, MICHIGAN

GASKETS • MUFFLERS • PIPES • RADIATORS • OIL RETAINERS

REALLY NEW

The most startling service jack advancement in a decade

ANNOUNCED but a few weeks ago — this revolutionary jack is already today's biggest seller! And why not! Here is everything you could possibly ask of a two-tonner . . . features that make shop and station owners say: "That's the jack I want *right now!*"

Look over these major benefits — then see your jobber today. "Feel" its spectacular action . . . get one or several for *faster, happier service!* Blackhawk Mfg. Co., Dept. J-420, Milwaukee 1, Wisconsin.



"CROWN-GEAR" control replaces the traditionally troublesome universal joint. Operate with a finger-twist—no matter what the handle position!

"TURTLE-SHELL" fully-enclosed design for longer life! Pump and all vital parts are shielded from dirt, grit and water.

A SUPERIOR, NEW POWER UNIT — patterned after the single-posed "Lightning Lift" two-speed pump of Blackhawk's famous 4-ton model. It's easily accessible.

UNITIZED FRAME. It's a complete one-piece, rigid casting — creating attractive streamlining, perfect alignment, protection for running gear.

BREEZE ALONG as fast as you can trot! Its heat-treated aluminum alloy frame is feather-weight — but incomparably durable. No dead iron.

**MODEL SJ-18
2-TON CAPACITY**

BLACKHAWK

SPECIAL GOOD NEWS FOR CAR DEALERS! This great new jack is also available with non-marring wheels for show-room service. Ask for SJ-18R.

HAND JACKS • WRENCHES • "PORTO-POWER" • "RECK-RACK"

SOUTHERN AUTOMOTIVE JOURNAL for FEBRUARY, 1950



for your
greater convenience
BLACK & DECKER'S
ATLANTA, GEORGIA
Sales and Service Branch

Now Located at
316 TECHWOOD DRIVE, N.W.
Phone: Lamar 0431

At 316 Techwood Drive, N.W.
We Offer You . . .

- Convenient Central Location!
- Plenty of Off-Street Parking Space!
- Enlarged Shop Facilities!

Electric Tool Headquarters has increased its facilities in the Southeast area to give you faster, more convenient service on Black & Decker, Van Dorn and Home-Utility products. We have enlarged our shop facilities . . . increased our stock of all genuine replacement parts . . . and our expert repairmen are ready to give you quick "factory" service at a more convenient location . . . all in our own brand-new building. There's ample, easy, off-street parking in our private lot. And a big, modern show-room carries a complete display of all our world-famous products. Factory service from company-owned-and-operated branches convenient to customers was an innovation with Black & Decker in the electric tool industry!

The COMPLETE Electric Tool Line



Black & Decker
HOME-UTILITY ^{ELECTRIC} **Van Dorn**
TOOLS

ELECTRIC TOOL HEADQUARTERS

Other Service Branches in the South at
Charlotte, Dallas, Houston, Memphis, New Orleans, St. Louis, Cincinnati

SOUTHERN AUTOMOTIVE JOURNAL for FEBRUARY, 1950

VAN NORMAN

opens up the Top-Quality Line of
AUTOMOTIVE DRILLS...TAPS...DIES



Screw Ex-
tractors,
Sizes No.
1 to 5.

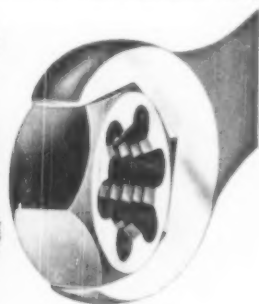
Taps—4 Types—
Hand, Spark Plug,
Machine Screw,
and Taper Pipe



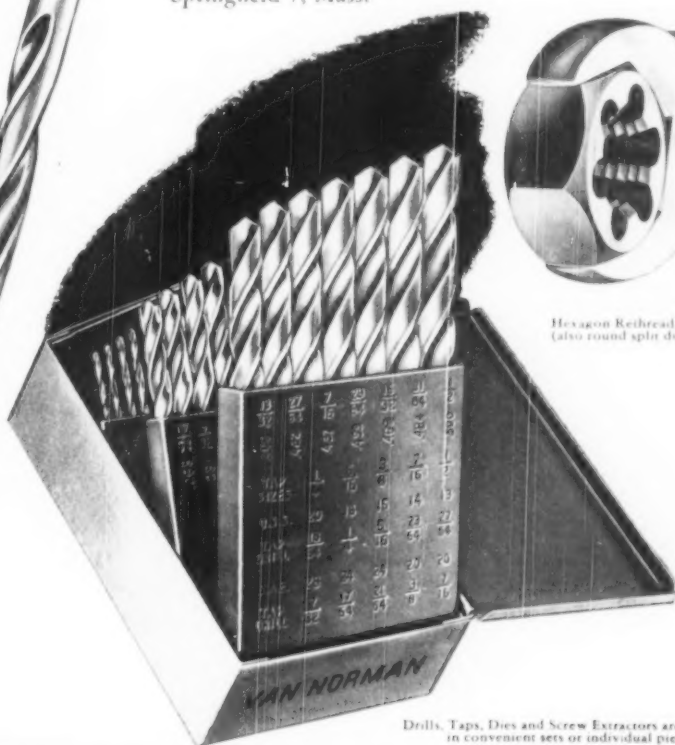
...he has
this line
in stock

High Speed Straight
Shank Drills in Frac-
tional, Letter and
Wire Gage Sizes.
Also Silver and Dem-
ing.

Here's the newest line... *with the longest experience in back of it!* Van Norman Quality means the Major Line of Cutting Tools, each one made to the "nothing-else-but" specifications that have made Van Norman the country's top name in milling machines, radius grinders... and the line you know so well, from Per-Fect-O Boring Bars to 8-ton Crankshaft Regrinders. When you need drills, taps, dies, and what goes with them, Buy the Best—Buy VAN NORMAN. See your jobber or write Van Norman Co., Springfield 7, Mass.



Hexagon Rethreading Dies
(also round split dies)



Drills, Taps, Dies and Screw Extractors are available
in convenient sets or individual pieces.

**The Best-Equipped Shop
Gets the Business!**

that's why *"It Pays to Van Normanize"*

SELF-CONTROL STARTS HERE



AND TO RESTORE
ENGINE PERFORMANCE

OIL-CONTROL STARTS HERE

To Stop Oil-Pumping, Replace Worn Engine Bearings

When an engine is sluggish on pick-up and always seems to drag that means oil pumping—and oil pumping means worn connecting rod and main bearings. Worn engine bearings let excess oil reach combustion chambers. It burns to motor fouling carbon on pistons, spark plugs, valves and rings. The best of new rings can't control oil pumping caused by

worn bearings. Correction starts where the trouble starts. Always check for and replace worn bearings. To restore power, pep and economy, replace in sets with Federal-Mogul Oil-Control Bearings. They are engineered for the job!

FEDERAL-MOGUL SERVICE

(Division of Federal-Mogul Corporation)
DETROIT 13, MICHIGAN



control oil-pumping where it starts—REPLACE WITH

FEDERAL-MOGUL



OIL CONTROL

BEARINGS



PRESSURE-PURGE

With Non-acid



FOLLOW THE LEADER! THE CHOLDUN 1950 PROGRAM AND CHOLDUN EQUIPMENT MAKES MONEY FOR YOU!

PRESSURE PURGER for Cleaning Cooling Systems



Dramatic, Impressive and Effective. Your customer can SEE the rust scale, grease and grime as it is purged from the Radiator and Motor Block.

Visible tumbler cleaning action, with continuous reversing motion, loosens, dissolves, purges and filters all harmful engine wearing particles.

OIL CHECKER, CHANGER and FLUSHER



Out with the old oil — in with the New. Your customer sees the dirty, "tired" oil and you sell new, "live," fresh oil and get extra profit for a flushing job. The CHOLDUN OIL CHECKER, CHANGER AND FLUSHER is a money Maker.

The attractive white enamel unit brings you Customers and builds good will and profits.

PURGITE CHEMICAL (to be used with Pressure Purger)



Do not confuse PURGITE with the ordinary caustic and acid type of radiator cleaners.

PURGITE is the "10" chemical cooling system cleaning Compound. It is a water softener. It removes rust scale, lime, iron and metallic deposits. PURGITE dissolves grease, tar, oil and dirt. PURGITE will not harm radiator, hose, aluminum, motor block, hands, clothes or finish on your car.

Choldun
MANUFACTURING CORP.

New Haven, Conn.

SALES OFFICE: 11 WEST 42 STREET, NEW YORK 18, N. Y.
EXPORT OFFICE: 238 Main Street, Cambridge 42, Mass.



PREVENT Overheating
PRESSURE-PURGE

IT'S SPRING
PRESSURE-PURGE
DEAD ANTI-FREEZE Now

1. Decal—Easy to apply to door or window.
2. Service Manual.
3. Radio Scripts.
4. Mats for local newspaper advertising.
5. Dealer Mailing Literature.
6. Catalog Sheets.
7. Outside Banner—Day-Glo Lettering—3' x 5'.
8. Over 1,000,000 Trade Publication ads.
9. Window Displays.

**FREE ADVERTISING CAMPAIGN TO
BRING YOU NEW SERVICE CUSTOMERS**

CHOLDUN MANUFACTURING CORP.

11 West 42nd Street New York 18, N. Y.

Please send complete details on the "PRESSURE PURGER" and "OIL CHECKER CHANGER and FLUSHER."

Please arrange for a Free Demonstration of this equipment.

Name _____

Address _____

City _____

Zone _____ State _____



You've Got to Give to Get

Charlie Claims

Reading Time: 1 min., 48 sec.



Thirty odd years ago, much of America's "personal transportation" depended upon the speed and endurance of horses. This was especially true in the small Midwest community where Charlie was born . . . and still lives. But Charlie was progressive. He liked automobiles. At twenty, he was driving a taxi and wondering where that would take him. He didn't yet realize what the quick, efficient service of automobiles was going to mean everywhere.

The busier Charlie got, the more he thought about the growing need for this type of transportation. His passengers, too, often spoke of the coming days when they hoped to have cars of their own. "Um-m," mused Charlie, "Why wouldn't automobiles be a good business for me?" And suiting the action to the thought, he went to see a local automobile dealer who figured that Charlie ought to make a star salesman.



"It didn't take long to see that there's where I belonged," Charlie recalls, "for I made more money than ever I dreamed of as a taxi driver . . . and I saved it, too! Some years later, when the first Chrysler cars were introduced in 1924, I scraped the very bottom of my financial barrel to qualify as a Chrysler dealer in my own right. I'd learned how to run the business pretty well, and I guess my record as a salesman helped when I talked with the Chrysler sales executives.

"I've been selling and servicing Chrysler and Plymouth cars ever since. It's been a pleasant and productive quarter century. In our community of 15,000, a merchant gets to know folks mighty well. We not only work but play together."

Charlie tells of his long friendship with a leading grocer, a college



professor and the owner of a clothing store who joined with him to form a "barber shop" quartet. They sang at social affairs all over the county "just for the fun of it" and only recently disbanded after 30 years of "closest harmony."

Charlie doesn't tell of his patriotic work during the anxious war years when the citizens of his town



drafted him as Mayor and Municipal Judge. But his story is a good example of why America has become great. There are hundreds of such closely-knit communities where business men who serve their neighbors well have prospered. Such men make their own careers, and serve to strengthen our nation.

Write for our free booklet containing a number of these stories of accomplishments by enterprising men Chrysler Corporation, 141 Massachusetts Ave., Highland Park 1, Michigan.



Chrysler Corporation

PLYMOUTH • DODGE • DE SOTO • CHRYSLER • DODGE "Job-Rated" TRUCKS
Fine Cars of Great Value

MOOG FULL POWER

The Winning Combination



© 1950 MOOG

Stops **COSTLY COMEBACKS**

Winning teams have the right combination that insures Full Power performance. Use the right combination to get a Full Power motor reconditioning job—Moog X-Plus Piston Rings installed on pistons dynamized by the Moog Dynamizer.

MOOG PISTON RING CO., ST. LOUIS 14, MO.

Division: MOOG INDUSTRIES, INC.

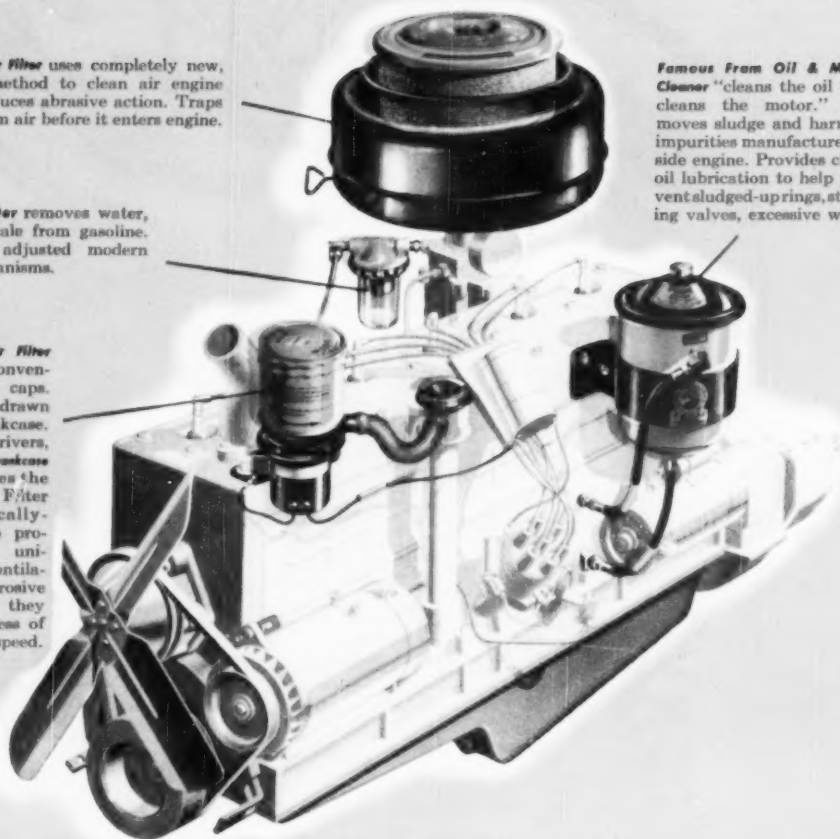
**Fram "SEE YOUR DEALER" Campaign
puts motorists' eyes on you for**

Complete **ENGINE PROTECTION**

Fram Carburetor Air Filter uses completely new, more efficient method to clean air engine breathes and reduces abrasive action. Traps harmful dust from air before it enters engine.

Fram Gasoline Filter removes water, rust, dirt and scale from gasoline. Protects finely adjusted modern carburetor mechanisms.

Fram Crankcase Air Filter replaces old conventional breather caps. Cleans the air drawn into your crankcase. For stop-and-go drivers, the **Fram Positive Crankcase Ventilator** combines the Crankcase Air Filter with an electrically-driven blower to provide continuous, uniform crankcase ventilation to remove corrosive blow-by gases as they form . . . regardless of engine or vehicle speed.



Famous Fram Oil & Motor Cleaner "cleans the oil that cleans the motor." Removes sludge and harmful impurities manufactured in side engine. Provides clean oil lubrication to help prevent sludged-up rings, sticking valves, excessive wear.



**FRAM GIVES YOU
WESTERN UNION
OPERATOR 25
DIRECTORY SERVICE**

Be a Fram Dealer and have your name listed with Western Union Operator 25. The most powerful ads in Fram history will urge motorists to call Western Union by number and ask for Operator 25 for the name and address of their nearest Fram Dealer. In 20,000 communities across the nation consumers will call their local Western Union office for information on where to buy. Calls in your area are referred to you when you're a Fram Dealer.



GIANT BILLBOARDS... on arterial highways in every state across the nation. These big, colorful, hand-painted bulletins remind motorists to call Operator 25 for your name. They give powerful display to Complete Engine Protection. Do the same yourself... Display Fram in your own windows for that extra punch that tells buyers, "You're Here! This is your nearest Fram Dealer!"

That's only the beginning...

but it will give you the idea on how Fram's greatest campaign... the "SEE YOUR DEALER" campaign, focuses on *you*... how it sells hard in many markets, in many ways with scientific advertising that is unmatched in the field... how it rounds up prospects in every corner of your area and then tells them where to buy... from *you*. Cash in now and ride the profit highway with Fram. See your jobber and get started with this 1950 campaign that puts *you* out front!

**FRAM CORPORATION, PROVIDENCE 16, R. I.
IN CANADA: J. C. ADAMS CO., LTD., TORONTO, ONTARIO**



BATTERY OF POWERFUL MAGAZINE ADS... Big Spreads and Full Pages month after month in Saturday Evening Post, Collier's, Popular Science sell hard on the story of Complete Engine Protection. They pound the local angle... your angle... tell motorists to call Operator 25 for your name when you're a Fram Dealer. Post and Collier's sell the mass market with simple, understandable words and colorful impact. Popular Science nails the mechanical-minded prospect with technical facts. All these buyers are turned over to you!



SALES-MAKING MERCHANDISING CAMPAIGN... In 1950, Fram gives you a new, better-than-ever merchandising campaign to help you sell... posters, banners, displays, merchandisers, booklets, uniforms and more. Get the whole story from your jobber. Fram backs you up with a sales training program for you and your men... a full-length sound color movie that gives you the inside story of Complete Engine Protection and the sure road to sales success.



why gamble on gadgets

RUST MASTER products are

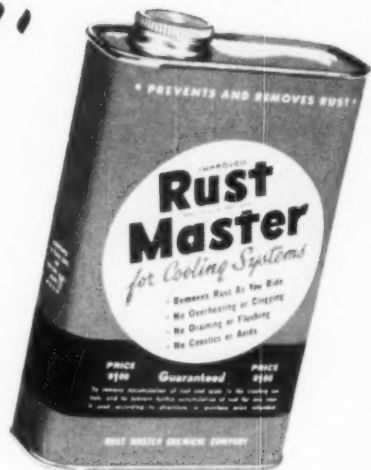
SURE TO SELL...



Why stock your shelves with slow-movers? Why take a chance on trick gadgets and "cure-alls" that cost both you and your customers worry and money?

Rust Master automotive chemicals are *proven*. They give peak performance in *every* car — *every* time. They're backed by years of successful experience and millions of satisfied customers.

So put your money on a sure winner. Sell Rust Master with confidence and without unnecessary gadgets. You're *sure* to be ahead in sales, profits, repeat business.



Rely on Reliable Rust Master Products—
Your Profits Do!



RUST MASTER — Dissolves rust and scale — cleans and protects entire cooling system against new formations for one year; ideal water pump lubricant and cold weather conditioner.

SIX MASTER — The perfect chemical pep-up and tune-up. Dissolves carbon-sludge and gum, thus increasing power and pick-up. Saves on battery and gas and oil consumption. Excellent crank-case anti-freeze.

LEAK MASTER — New improved patented Stop Leak. Harmless to all metal or rubber. Retards rust and improves water circulation.

NO FUSS • NO MUSS
JUST POUR • NO MORE



PRODUCTS WORK WHILE YOU RIDE

Chemical Company
Mfg. Chemists

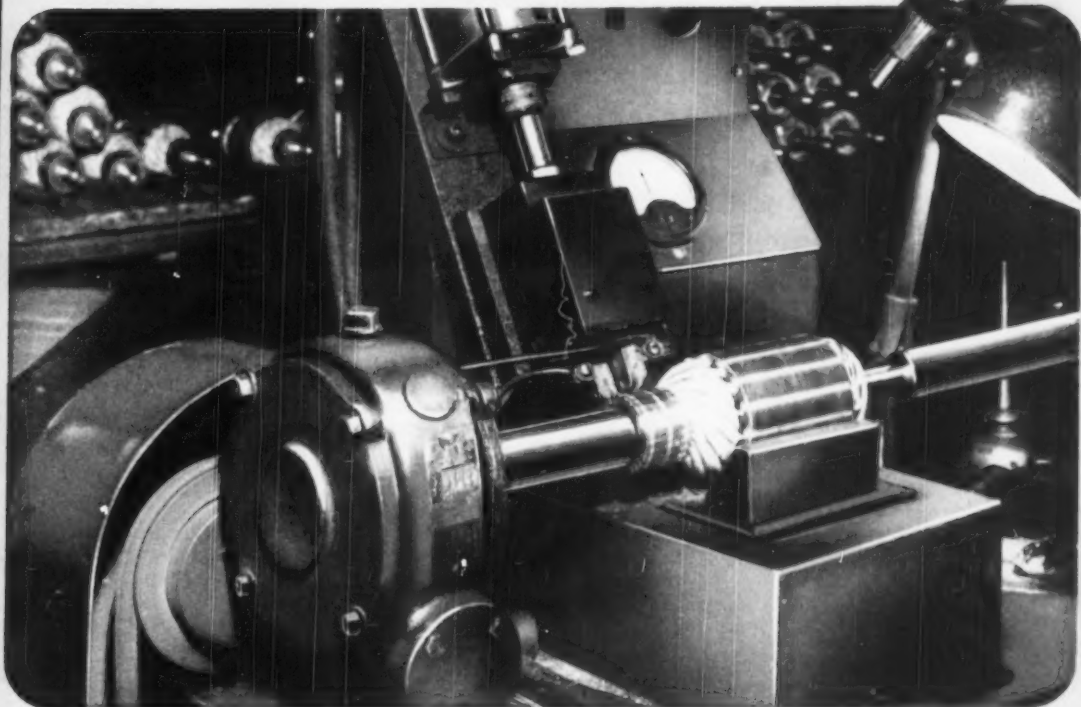
56 CREIGHTON ST., CAMBRIDGE, MASS.

THE SILENT PARTNERS OF MOTOR EFFICIENCY

Tested Quality

HELPS YOU DELIVER

AMERICA'S FINEST ELECTRICAL SERVICE



Before and after armatures are impregnated in insulating varnish and baked, they are tested to insure freedom from imperfection including shorts, grounds and incorrect connections in the winding.



Your established reputation is your most valuable asset — an asset you can protect only when your fine workmanship is matched by parts of unfailing quality. It costs real money to get customers. You can hold them for continued volume and profits only when you deliver full satisfaction . . . that's

why it's so vital you combine your honest workmanship with the tested quality of Auto-Lite Original Factory Parts. The importance of this quality is proved by this fact: more than half of America's car makers specify Auto-Lite. To find how Auto-Lite can help you write to

THE ELECTRIC AUTO-LITE CO., Parts & Service Division • Toledo 1, Ohio
Canadian inquiries should be addressed to Sarnia, Ontario



Auto-Lite Engineering Assures Dependability



RAW MATERIAL TESTS . . . all materials must measure up to predetermined standards before they are released to production.



ENGINEERED SPECIFICATIONS . . . scientifically developed for every part. Nothing left to chance. High quality assures dependability.



CONTINUING IMPROVEMENTS . . . by the foremost engineers working in one of America's great engineering laboratories.



APPROVAL OF LEADING CAR, TRUCK, AND TRACTOR MAKERS . . . as original equipment, after most searching tests by engineers.



FINISHED PRODUCTS TESTS . . . every component and assembly passes repeated tests, checked constantly with laboratory research.

Money cannot buy better Automotive Electrical Equipment



the AUTO RADIO MARKET

the demand for



5½ million cars sold in '49!

Out of this overwhelming figure a gigantic market is yours for the taking! One big-three manufacturer reports that 75% of their lower priced cars are shipped **WITHOUT RADIOS**. By an average of the four post-war years for all models of cars made by this manufacturer, the number of cars shipped without radios totals 85%! This added to other production figures from the auto industry represents a terrific market for America's favorite auto radio—Motorola, of course!

Again this year Motorola development, design and production of auto radios lives up to the Motorola tradition of high quality. Again, tireless product research combined with mature engineering techniques pay off for you—pay off for your customers! Unfailing power, 3-dimensional Golden Voice tone, and precision construction that minimizes servicing are the qualities your customers seek in auto radios. Feature Motorola and you feature these profit-producing qualities!

40 million families read about Motorola every month!

And they're *buying* families every one! They're the people who read such powerful national magazines as LIFE, THE SATURDAY EVENING POST, COLLIER'S, TIME, NEWSWEEK, LOOK, NEW YORKER, NATIONAL GEOGRAPHIC, SUNSET, COUNTRY GENTLEMAN, FARM JOURNAL, SUCCESSFUL FARMING and others—*believed in* by folks in all walks of life. Tie-up with Motorola—a product that's *believed in*—backed by big-name national publications!

*for more sales, contact your
Motorola distributor today!*



the BEST is now BETTER than ever before

is BIGGER THAN EVER!

Motorola is tremendous!

*new 1950 models
are the best ever*

... WITH SELLING FEATURES GALORE! Motorola—with more "FIRSTS" than any other, now presents a brand new line for '50! Always the standard for the industry, the new Motorola auto radios give your customers an even greater measure of value for their radio dollars . . . and promise you a year 'round source of easy sales and trouble-free profits! Action now will ring your register later!

use this
display-demonstration
board and you'll sell

everybody knows and prefers

Motorola

RADIOS • AUTO RADIOS
TELEVISION

MOTOROLA INC. • 4545 AUGUSTA BLVD. • CHICAGO 51, ILLINOIS





You Can't Miss

WITH
**PACKARD
AUTOMOTIVE
CABLE**

PACKARD CABLE—
Tops for Every Requirement

LOW TENSION CABLE—The new and improved Packard low tension cable gives definitely superior performance . . . is tougher . . . lasts longer—at no increase in price.

HIGH TENSION CABLE—Packard's Four-Forty and Lac-Kard high tension cables are known for dependable performance on every make and model vehicle in every type of service. Available in spools and sets.

BATTERY CABLES—Packard full-size battery cables assure fast cranking and quick starts, together with long life. They are available with your choice of the LeadAlloy terminal or the leaded brass terminal.

Packard cable is the sure shot answer to all your wiring requirements. It's the best there is . . . chosen as standard equipment on more cars, trucks and buses than any other make. Packard cable is widely distributed, nationally known. It's easy to stock, easy to sell. The clearly marked cartons give you complete size, gauge and application data at a glance . . . are self-displaying, keep cable clean and ready for instant use. Order Packard cable and be sure of hitting the mark with the right size cable for the right job every time.

Packard
TRADE MARK
Packard Electric Division, General Motors Corporation
Warren, Ohio



FOREMOST BUILDER OF AUTOMOTIVE AND AVIATION WIRING

IMPORTANT ANNOUNCEMENT!

FOR A LIMITED TIME ONLY, we are offering you a Special Deal at a greatly reduced price and added profit! In addition, this Deal can make you the Tire Pressure Expert of your community. National advertising will direct customers to your door to get (1) ease of steering; (2) riding comfort; (3) safety with long, trouble-free tire mileage. You get *new* customers, build *repeat* customers.

Here's All You Have To Do:

1 Memorize this formula for accurate pressure on Hot or Cool Tires.

- a Hot tires result from steady driving, causing a hot-air pressure build-up above the recommended cool tire pressure. In City driving it is 5 lbs. In Highway driving it is 3 lbs.
- b Cool tires result from standing still for at least two (2) hours after which they may reach your station traveling only a short neighborhood distance with no extra pressure build-up.
- c All you need to remember this is the "C" and "H" and what they represent when air servicing tires.

This simple formula, plus the easy instructions found in the Deal Form, qualifies you as the tire expert in your community.

2 Order now this Special Profit Deal Unit containing:

- a A Master Gauge—to check the accuracy of every day tire pressure gauging devices.
- b 200 new Pressure Test Buttons—coated materials serve as proper air pressure reminders.
- c 200 No. 980 Valve Caps—to guarantee against air loss through valve stems.
- d 10 No. 7050 Passenger Tire Gauges for your customers' personal use.

These Products, Purchased Separately, Would Cost You	\$23.70
Total Unit Costs Only (For Limited Time)	19.50
Saving You	\$ 4.20
Total Resale Value For You	\$32.50
Total Cost To You	19.50
Total Profit (On \$19.50 Invested)	\$13.00

**AND YOU OWN
THE MASTER GAUGE**

PLUS: Window Streamers, Counter Leaflets, Mailing Pieces (in the unit) and powerful National Advertising urging people to come to you as the qualified Tire Pressure Expert in your community.



Complete Unit For No. 4471 Deal



Master Gauge



New Pressure Test Button



Valve Cap

Glove Compartment Gauge

**CALL YOUR SUPPLIER NOW
OR MAIL THE COUPON TODAY TO—**

A. SCHRADER'S SON

Division of Scovill Manufacturing Company, Incorporated

BROOKLYN 17, NEW YORK

A. SCHRADER'S SON, Brooklyn 17, New York

Send me at once the No. 4471 Unit as described at \$19.50

Name _____

Address _____

City _____

State _____

My (company's) name(s) _____

Address _____

THE SATURDAY EVENING POST

March 11, 1950

Rubbermaid
KAR-RUGS

the "ORIGINAL"
rubber "throw-rugs"
for automobiles

6 Rich colors add harmonizing beauty. Burgundy Red, Royal Blue, Forest Green, Cocoa Brown, Midnight Black, Silver Grey.

4 Engineered sizes completely equip front and rear floor areas of any car.

"Belong" in Your Car!

To Protect Floors from Dirt and Wear
Dress up Interior in Colorful Beauty

Dress up interior in color. Keep floor clean at all times. Wash floors frequently with soap and water. Sweep or vacuum daily. Clean walls and ceiling weekly. Wash windows and doors regularly. Change air filters monthly. Replace light bulbs as needed. Check smoke detectors monthly. Test carbon monoxide detector annually. Check fire extinguishers annually. Check fire escape route. Practice fire drill twice a year. Evacuate building immediately in case of fire. Report suspicious activity to security guard or police. Follow all posted signs and instructions. Do not drink or use drugs while working. Wear seat belt while driving. Do not wear alcohol or drugs while operating machinery. Do not operate machinery if you are impaired. Do not work alone. Get help if you need it. Call for assistance if you are injured. Report accidents to supervisor immediately. Follow safety rules at all times. Do not take shortcuts. Safety first!

and looking with permission
out door, go to the
... ..

MASTER ONIC

4
Engineered
Sizes

MARCH 11TH
THE SATURDAY EVENING
POST
...IN THE

THIS OPENING SMASH IN THE
1950 BIG NATIONAL PROGRAM
IN POST AND COLLIER'S!

6
Beautiful
Colors

Silver Grey
Burgundy Red
Royal Blue
Forest Green
Cocoi Brown
Midnight Black

Cocoa Brown
Midnight Black
HANDY IN THE HOME AS DOOR AND FLOOR MATS

Merchandising Program for 1950!

To Help YOU Cash-in on this TREMENDOUS PROFIT POTENTIAL

The market is wide open — 95% of the nation's 34,000,000 cars need Kar-Rugs. Car owners see Kar-Rugs and buy them!

SELF-SELLING DISPLAY RACK

Attractive "out front" where customers are reminded — get the sales story fast — picture Kar-Rugs in their car. Compact yet ample to display all sizes and colors and carry stock on center shelf. Put this in a good traffic spot and sell MORE Kar-Rugs. Ask your jobber!



Cash in with these
SALES BOOSTERS

NEW

"SETS OF FOUR" PACKAGE

Two assortments that fit all popular cars. Make every sale a "set of four" for faster turnover, higher unit sales. Attractive display package makes fine gift suggestion. Easy to stock and handle — assures proper sizes and colors for quick service. Ask your jobber!

MORE THAN EVER
IT'S PROFITABLE TO SELL

Rubbermaid.
KAR-RUGS

THE WOOSTER RUBBER CO. • WOOSTER, OHIO

In Canada: Rubbermaid Products,
Toronto, Ontario

Division 5



Sherlock Holmes
and Dr. Watson



WINNING COMBINATIONS

YOU and UNITED MOTORS LINES

For our part, here's what we bring to the *winning combination*: products that are used as original equipment on the country's leading cars, trucks and buses; products that are in use on so many *millions* of vehicles today that the parts-and-service potential is almost limitless; products whose preferential position insures a strong and continuing market, month after month, year after year. If you are interested in a *permanent* business, with year-round profits, talk to your United Motors distributor, or write directly to us.

UNITED MOTORS SERVICE

Division of General Motors Corporation
General Motors Building, Detroit 2, Michigan

DELCO Batteries
AC Gauges, Speedometers
and Rebuilt Fuel Pumps
DELCO Auto Radios
SAGINAW Jacks
MORaine Engine Bearings
DELCO Radio Parts
HYATT Roller Bearings
DELCO Home Radios
and Television
INLITE Brake Lining
DUREX Gasoline Filters

HARRISON Heaters
DELCO Shock Absorbers
NEW DEPARTURE
Ball Bearings
GUIDE Lamps
HARRISON Thermostats
DELCO-REMY Starting,
Lighting and Ignition
KLAXON Horns
HARRISON Radiators
ROCHESTER Carburetors
DELCO Hydraulic Brakes



Take a Good Look at

KENT-MOORE'S NEW

SERVICE MERCHANDISER!



...Look at its important
"PLUS-VALUE" FEATURES!



- 1 **SECTIONAL UNIT CONSTRUCTION**—Permits unusual flexibility of arrangement to fit your particular service department. Sturdily built. Quickly, easily assembled.
- 2 **COMPACT, FUNCTIONAL DESIGN**—Completely assembled Merchandiser measures only 53 1/2" high by 97 1/4" long by 32" wide at bench. And nearly every cubic inch is useable storage or working area space!
- 3 **CONVENIENT CENTER TOOL PANEL**—Perforated to hold tool clips and hangers. (Roll-away aluminum curtain with lock, and fluorescent lighting, available as optional equipment.)
- 4 **LARGE WORKING SURFACE**—Measures full 48" long by 30" wide. Bench top completely protected by thick tempered Masonite cover. Deadens sound!
- 5 **COMPLETELY ENCLOSED WORK BENCH**—48" x 32" x 34". Plenty of storage space inside with provisions for optional drawers and shelving. Locking doors feature exclusive torsion bar hinge and frame construction for extra strength and rigidity.
- 6 **SPACIOUS END STORAGE CABINETS**—With perforated back and side panels for tool clips and hangers or for shelving. Exclusive torsion bar door construction.



Here it is, Dealers! Just what you've been looking for to snap up appearance and spark increased efficiency in your bustling service department. It's the new Kent-Moore Service Merchandiser... smartly styled, sturdily built, functionally engineered to provide maximum utility for your service operations. Yes, take a good look... at its gleaming white baked enamel finish, its bright red trim. Bound to make a good impression on your service customers! Note its compact design, its sectional unit construction. Fits in almost any desired location, gives you complete flexibility of arrangement in single or continuous line installation. Check its rugged construction. Made of heavy gauge metal that'll stand up in use, take lots of abuse. Storage space? Plenty of it... on the center tool panel, in the big roomy end cabinets, and in the work bench itself. Doors swing freely, fit snugly, lock securely, too. And as for work bench surface area, just measure it. 48" wide by 30" deep, completely protected by a durable tempered Masonite cover. Now for price... the best news of all! So surprisingly low that you can't afford to pass it up. Act now! Write for complete information today!

...then look at its amazingly low price!

Kent-Moore
ORGANIZATION, INC.

GENERAL MOTORS BUILDING • DETROIT 2, MICHIGAN

\$210⁰⁰
F.O.B. JACKSON, MICHIGAN

Engineers and Manufacturers of Special Automotive Service Tools and Equipment
Sole and Service Engineering Representatives in Principal Cities Coast-to-Coast

7 SERVICE BUILDERS

The logo features the letters 'AC' in a large, bold, white sans-serif font. The 'A' and 'C' are connected. The letters are set against a dark circular background. Behind this circle and another overlapping one to the right, there are stylized, overlapping circular shapes with horizontal lines, creating a sense of depth and motion. The entire graphic is set against a black background.

AC

**QUALITY
PRODUCTS**

AC**SPARK
PLUGS****AC SPARK PLUGS . . . with patented CORALOX Insulator**

Demand is rising swiftly as the powerful CORALOX advertising campaign increases consumer preference. CORALOX, plus AC's dominant equipment position, makes AC Spark Plugs a "must" for service dealers who want real replacement volume.

AC**OIL
FILTERS****AC OIL FILTERS and ELEMENTS . . . "Dirt-Proof" Engine Oil**

AC's "Dirt-Proof" campaign not only sells the need for oil filters, but also sells the superiority of AC Filters and Elements. Cash in on the industry's fastest-growing replacement market.

AC**FUEL
PUMPS****AC FUEL PUMPS . . . "Heart of the Fuel System"**

The most popular of all equipment and replacement units. 40,000,000 in daily use. Should be replaced every 2 years to keep your customers out of trouble. Don't overlook the big profit possibilities in your territory.

AC**CABLE &
CASING****AC SPEEDOMETER CABLE-CASING ASSEMBLIES**

Patented machines and processes make AC Cables and Casings tops in quality. Conveniently packaged for quick service. Original equipment on half the cars on the road.

AC**AIR
CLEANERS****AC AIR CLEANERS and ELEMENTS**

Here's another replacement market in which AC is the big name. Heavy-duty cleaners for cars, tractors and trucks. Low-cost renewal elements that save time for you and provide new cleaning performance for your customers.

AC**FLEXIBLE
LINES****AC FLEXIBLE GASOLINE AND OIL LINES**

Assortment available with attractive Wall Merchandiser. Make-up Kit, complete with hose and assortment of fittings, also available. All lines built to highest quality and SAE standards.

AC**GASOLINE
STRAINERS****AC GASOLINE STRAINERS**

Made in both replaceable and re-usable element types. AC quality throughout—protect delicate carburetor parts—remove water, dirt and lint from fuel.

Guide FOG LAMPS

UNIVERSAL Acceptance
UNIVERSAL Application
UNIVERSAL Satisfaction

They're *good* because they're *Guide*—compact, durable, high-quality throughout—undoubtedly the highest development in the field of automotive optical science for the improvement of visibility during adverse weather conditions.

Packaged in pairs, with interchangeable mountings for attachment to splash pan, bumper bracket or front fender, Guide Fog Lamps fit *all* makes and models of cars and trucks.

And don't overlook the *profit* angle! Any item so universally accepted as a pair of Guide fog lamps can light the way to *profits* as well as to safety!



GUIDE LAMP—A UNITED MOTORS LINE
Available Everywhere Through
UNITED MOTORS DISTRIBUTORS



Guide MULTI-PURPOSE LAMP

Here's a four-way winner! It's a combination Trouble Lamp, Spotlamp, Floodlight and Sealed-Beam Headlamp replacement unit. Plugs into cigar lighter . . . just demonstrate it in some of your customers' cars and note how easily it sells itself!

Guide LAMP

Division of General Motors
Anderson, Indiana

Out in Front HIRSIG In the South



ANDREWS MANUFACTURING CO.
ANDREWS Electrical and Ignition Parts—
Battery Cables—Wiring Assemblies—Spool-
ed Wire—Spark Plug Wires



ARROW ARMATURES CO.
ARROW Armatures—Generators—
Starters—Field Coils



TRIPLEX CORP. OF AMERICA
TRIPLEX Alloy Pistons



**DETROIT ALUMINUM &
BRASS CORPORATION**
MICHIGAN Engine Bearings



MANLEY VALVE CORPORATION
MANLEY Motor Intake and
Exhaust Valves



WICKWIRE SPENCER STEEL CO.
WICKWIRE Clutch Springs—Valve Springs
—Starter Springs—Hose Clamps—Mechanics
Wire—Chain Repair Links



LINMAR PRODUCTS CORPORATION
LINMAR Water Pumps
Oil Pumps



FISHER PRODUCTS COMPANY
FISHER Carburetors—Ford Distributors—
Clutch Pressure Assemblies



BEARING COMPANY OF AMERICA
BCA Clutch Release Bearings—Radial Ball
Bearings—Wheel Bearings

MOTOR PARTS

Dealer and Repair Shops are assured of finer quality, better fit and greater value in this group of motor parts produced only by basic manufacturers.

Go to the jobber who features the lines shown here — they are all leaders in their field, backed by manufacturers with facilities to produce the best the market affords. They are represented in the South by the Hirsig organization.

Other leading lines of automotive merchandise represented by Hirsig are: ANCO Mirrors, Blades — AUSCO Jacks — B & B Hoaters — CAMEL Patches — CASCO Products — CLEVELAND Tire Chains — DURO Tools — ELECTROLINE Lights — FRAM Filters — GEARY HERSHEY Front End Parts — HERCULES Universal Joints — HUFFMAN Measures — KIMBLE Glass — MITY MIDGET Sanders — MONROE Shock Absorbers — RUSTMASTER — SUPAR Tire Pumps, Breezies — SUPERSTAT Thermostats — SUPERIOR Shock Absorbers — THERMO Anti Freeze — THOR Batteries — TYSON Bearings.

Hirsig men, located in 17 cities throughout the South, help jobbers deliver the best possible service to the automotive dealers of the South.



LAWRENCE M. HIRSIG & CO. Jacksonville 2, Florida



FOR A MORE PROSPEROUS 1950 ... ATTEND THE

8th Annual SOUTHWEST AUTOMOTIVE SHOW



... theme of the 1950 Southwest Automotive Show

More than 250 progressive Southwestern jobbers bring this industrially important show to the automotive trade of this territory.

Be sure to attend.

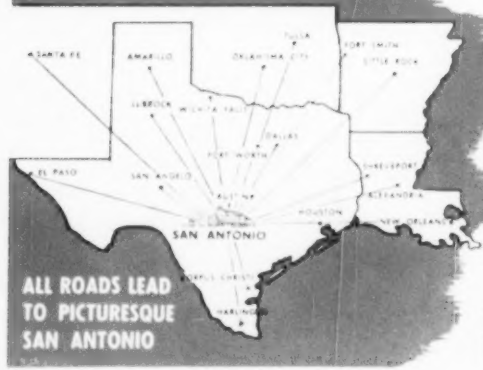
FREE TICKETS ARE AVAILABLE FROM YOUR OWN SPONSORING JOBBER.

ACTION .. NEW PRODUCTS .. CONTACTS .. PROFIT-MAKING IDEAS

Assembled here under one roof is the greatest exhibit of automotive products, equipment and tools to be seen outside of the National Show. It presents untold profit-making opportunities for manufacturer, jobber, dealer and service organizations.

Whatever your stake in the Automotive Service Industry, there's plenty to attract you to this show. Whether it's new business opportunities, cost-reducing tools, or shop equipment you seek, you'll find it at the 8th Annual Southwest Automotive Show. Set your goal now to attend!

**In Beautiful Romantic
SAN ANTONIO, TEXAS
MARCH 23-24-25-26, 1950**



IN THE NEW COLISEUM

For Housing Reservations and Show Information
WRITE SOUTHWEST AUTOMOTIVE SHOW
Insurance Building • San Antonio, Texas

Wagner national advertising in the POST and Collier's develops business for YOU!



It pays to be identified with Wagner Lockheed—the best known name in brake service products.

Year after year Wagner has run colorful half-page ads in the Saturday Evening Post and in Collier's. (One of these ads, running currently, is reproduced in miniature at the right.) These two great national magazines have a combined circulation of over 7 million copies per issue, and a readership of more than three times as many millions.

Many of the people who see the Wagner ads are YOUR customers. They live in your neighborhood—they drive in and out of your place of business. Cash in on this great promotional program.

You'll find Wagner a great name upon which you can build a profitable business. See your Wagner jobber today. Find out how convenient and advantageous it is to get all your brake service products from one source. There's a jobber near you who can supply the complete line of Wagner Lockheed Hydraulic Brake Parts and Fluid, and Wagner CoMaX Brake Lining in every type and size you need. . . . Ask him, or write us, for a free copy of Wagner Catalog AU-500.

Wagner Electric Corporation
6362 Plymouth Avenue, St. Louis 14, Mo., U.S.A.

824-6



Are YOUR brakes safe?

Remember the warning of the National Safety Council—
"The life you save may be your own!"

- | | YES | NO |
|--|--------------------------|--------------------------|
| 1. Do your brakes "grab" or "squeal" when you stop? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Does the pedal feel "spongy" when you apply the brakes? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Does the pedal "spong away" from your foot at a holding stop? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Do you have to "pump up" your brakes when you stop? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Does your pedal almost touch the floor when you stop? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Does your car "pull" to either side when you brake it? | <input type="checkbox"/> | <input type="checkbox"/> |

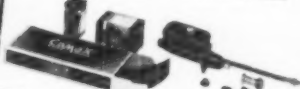
If you answer "yes" on any point
...play safe...have your brakes
checked now! If replacements
are needed, for safety's sake
specify...

Wagner Lockheed HYDRAULIC BRAKE PARTS and FLUID and CoMaX BRAKE LINING

You can depend upon Wagner quality because
Wagner products are used as original equipment by
automobile, truck and trailer manufacturers.

You can get brake service—where Wagner products
are used—in your neighborhood. If you don't know
where...ask us.

Wagner Electric Corporation
4400 Plymouth Avenue, St. Louis 14, Mo., U.S.A.
In Canada: Wagner Bros. Limited, Montreal, Quebec



DET. 1001



HYDRAULIC BRAKE PARTS and FLUID
BRAKE LINING, AIR BRAKES, THERMOSTATS
TRANSDUCERS, INDUSTRIAL BRAKES



You can depend on Wagner quality because Wagner
products are used as original equipment by auto-
mobile, truck and trailer manufacturers.

WALKER



*it pays to be
identified
with Walker*

BOOST YOUR SALES... BOOST YOUR SERVICE VOLUME

.....

WALKER
"Individually Tuned"
SILENCERS

WALKER
OIL
FILTERS

.....

WALKER
JACKS

WALKER
Electric
LIFTS

...MAKE MORE SALES EACH DAY



with the most powerful name in Exhaust System service

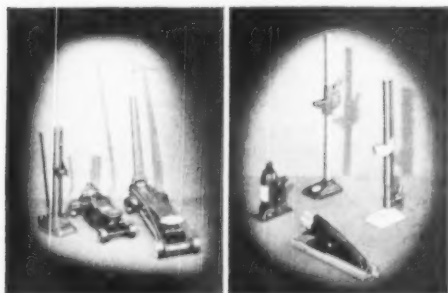
You, as an Authorized Walker Dealer, can offer your customers the finest of all exhaust system services—a Walker Silencer "Individually Tuned" to each particular car make and model—for freedom from noise fatigue . . . for safety from dangerous exhaust fumes . . . for peak engine performance. With years of consumer advertising in *The Saturday Evening Post* . . . with sales-making, point-of-sale identification . . . and with periodic merchandising programs, Walker helps you make real money in mufflers.



with America's newest, finest Oil Filter

It's easy to sell Walker Oil Filters because it's easy to show your customers how the patented Walker Laminar construction gives real engine protection by keeping the oil clean between oil changes. This exclusive principle of multiple filtration—surface filtration, depth filtration and progressive filtration—cleans oil better, keeps it clean longer. Make this your best, most profitable oil filter year with Walker—America's newest, finest oil filter.

...DO MORE JOBS EACH DAY



with Modern Jacks engineered for today's modern service

In the shop, on the driveway and out on the road, there is a Walker Jack to meet your every need. And in this complete line, there is a Walker Jack to serve your customers' every purpose. In each of these new, improved, deluxe jacks you will find an extra margin of strength for the unexpected . . . an extra margin of safety for greater protection . . . an extra margin of power when emergency calls.



with the lift that's always "Open for Business"

Increase service volume and profits 20% to 50% with the advanced, new Walker Electric Lift. New positioning of the support beams increases unrestricted working space by 36%. Six extra inches of working height give you even greater working convenience. From floor to car bottom, your men and equipment work free from any obstruction in the famous Walker Open Work Zone. And you can locate it wherever you want it—at the lowest installation cost of any lift on the market.

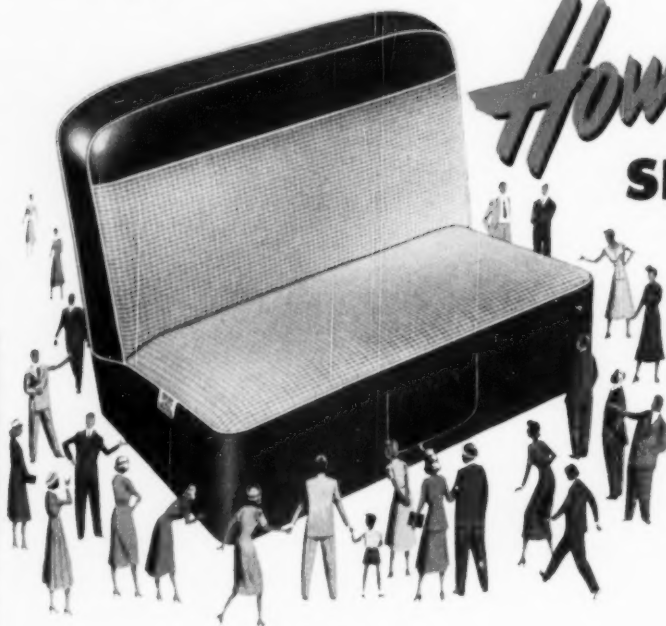
WALKER MANUFACTURING CO. OF WISCONSIN
Racine, Wisconsin

...BOOST YOUR PROFITS WITH WALKER IN 1950

GREAT NEWS for you who sell

Howard Zink

SEAT COVERS



Beginning with the February 18 issue, out February 15.



Beginning with the March issue, out February 15.

PLASTIC FABRICS

Beautiful colors in both bold and neat patterns are available in Lumite woven from rayon.

RAYON CLOTHS

Their lustrous satin-like beauty is offered in three most wanted solid colors: maroon, blue and green.

PLASTIC COATED FIBRE FABRICS

Such famous materials as Supertine Textilene Sunsure are available in various colorful patterns.

How do you like that? Now you have the most wanted seat covers in America being made even more popular by the terrific power of full color half-page advertisements in THE SATURDAY EVENING POST and HOLIDAY. It means you'll sell more Howard Zink seat covers than you ever did—and already you and thousands of other dealers are selling more Howard Zink seat covers than any other make in the land.

Want to know more about the wonderful Howard Zink 1950 line? Want details of the Howard Zink 1950 program for dealers? Just write us!

Howard Zink

THE HOWARD ZINK CORPORATION
FREMONT, OHIO

Pasadena, N. J. • Long Beach, Calif. • Charleston, Miss.

World's largest manufacturer of auto seat covers

PERFECT

TRADE MARK



- ★ Stays Put
- ★ Fits all Cars*
- ★ Streamlined Design
- ★ Unequalled Beauty

- * "U" TYPE—A favorite in the industry. Fits ALL rims having factory trim rings except late model Cadillacs.
- * "C" TYPE—A FLAT weight which "lays close." Fits most rims with regular factory trim rings. Made in 5 sizes.
- * "SPECIAL" TYPE—Made for late model Cadillacs with hub caps covering entire wheel. 6 sizes.



PERFECT EQUIPMENT CORP.

804 W. Morgan St.

KOKOMO, IND.

P.O. Box 706



Manufacturers of Wheel Weights for Trucks and Passenger Cars



Snap-on Hydra-Pak

Speed Body Straightening!

Here's the **ONE MAN** way to apply
HYDRAULIC POWER with more
accuracy . . . and more profit for you

You can add more speed and greater efficiency to your body and frame work with a Snap-on Hydra-Pak because it can be set up and operated by *one man*. The Hydra-Ram which develops ten tons of hydraulic power can be used to push, pull, clamp, spread or bend, and operates at full efficiency in any working position . . . retracts automatically when hydraulic power is released. Any one of hundreds of working set-ups can be assembled, ready for

action, in a few minutes . . . a factor that means increased efficiency and more profits for you. Hydra-Pak parts and attachments carry a guarantee against defects in workmanship and materials. Snap-on's nationwide tool service is available through 40 factory branch warehouses located in key industrial centers.

Write for booklet describing Hydra-Pak and its application to your work.

**SNAP-ON TOOLS
CORPORATION**

8052-B 28th Avenue
Kenosha, Wisconsin



HOW TO BE A PROFITEER

...in one easy lesson

profits primer

STOCK PLASTIC GLOSS

Sell what every motorist wants! It's Plastic Gloss. Your customers will tolerate no substitute for this amazing automobile polish!

PUSH PLASTIC GLOSS

Display it, talk it, push it! Every motorist is a prospect — a sure fire customer if you'll tell him the truth, the whole truth about Plastic Gloss!

BANK THE PROFITS

Stock up during the pre-season Free Goods Deal. Be a profiteer! Get that 133-1 3 per cent profit for yourself. Time's growing short. Order your deals now.



Remember, the Plastic Gloss Free Goods Deal for Profiteers Positively Ends February 23, 1950.

WHICH PROFIT MAKING DEAL FOR YOU? ORDER FROM YOUR JOBBER NOW



Special Deal No. 1

	List	Your Cost	Your Profit
Regular case — 24 pints	\$ 30.00	\$18.00	\$ 12.00
SPECIAL CASE—24 pints plus 4 pints FREE	\$ 35.00	\$18.00	\$17.00

Special Deal No. 2

3 Regular Cases — 72 pints	\$ 90.00	\$48.60	\$ 41.40
3 SPECIAL CASES—72 pints plus 12 pints FREE	\$105.00	\$48.60	\$56.40

Special Deal No. 3

6 Regular Cases — 144 pints	\$180.00	\$90.00	\$ 90.00
6 SPECIAL CASES—144 pints plus 24 pints FREE	\$210.00	\$90.00	\$120.00

BUFFALO PLASTIC FINISH CO., INC.

152-154 OAK ST.

BUFFALO 3, N. Y.



"More dealers reline
with Raybestos
than with any
other
brake lining"

That's right. Raybestos is America's biggest selling brake lining. Here's why. Raybestos PG Sets provide dealers with the right combination of linings... selected from seven different types... for each make and model of vehicle. They are *proving ground tested*... and each set is rigidly inspected during manufacture. And Raybestos constantly backs up the dealer's selling effort with full factory cooperation.



THIS CERTIFICATE

is packaged with every Raybestos Brake Set. Use it to increase your volume of brake work.

...AND THIS MESSAGE

"Don't learn about bad brakes by accident!

Have them certified safe for driving."

features the certificate month after month in our Saturday Evening Post advertising.

Raybestos

The Raybestos Division of RAYBESTOS-MANHATTAN, INC., Bridgeport, Conn.

America's Biggest Selling **BRAKE LINING**



RAYBESTOS-MANHATTAN, INC., Manufacturers of Brake Linings • Brake Blocks • Clutch Facings • Radiator Hoses • Fan Belts • Mechanical Rubber Products • Rubber Covered Equipment • Packings • Asbestos Textiles • Powdered Metal Products • Abrasives and Diamond Wheels • Drilling Bits



for the proof
of
performance

Use DUTCH BRAND Masking Tape



"Old hands" at paint shop
masking like the feel of this
new tape...IT'S EASY TO USE!

FLEXIBLE

Allows easy application around sharp curves of reveals or beads.

WILL NOT CURL BACK

It has "dead stretch" that prevents curl-back when applied.

THIN CONSTRUCTION

Thin—very thin—to prevent "pile-up" of paint when spraying.

CORRECT ADHESION

Just the right grab and holding power but easy to remove without leaving residue.

PROPER STRENGTH

This tape is strong and does not rip or tear on the job.

NO SWEATING

Humid weather does not cause tape to fall off.

FOR USE WHEN WET SANDING

Wet sanding does not affect holding power of the tape.

APPLIES TO ALL SURFACES

Works equally well on lacquers, synthetics, undercoats, metal, weatherstripping or upholstery.

Here
are its
features



There is no substitute for trying a product under actual working conditions to determine its merits . . . that's why it will pay for you to use DUTCH BRAND Masking Tape. You'll find all the features you desire in a tape for speedy application and top performance.

The manufacturers of DUTCH BRAND Masking Tape have been making electrical tape and other repaint and repair shop items for nearly forty years. During this time they have built an enviable reputation for manufacturing "know-how" and for products that have quality. With this background they developed the new DUTCH BRAND Masking Tape. Another quality product for your satisfaction.

Try this tape the next time you order . . . ask for and insist upon getting DUTCH BRAND.

Order from your jobber . . . today!

VAN CLEEF BROS. INC.

Manufacturers . . . Rubber Products . . . Est. 1910

CHICAGO 19, U. S. A.

*Now Chevrolet Dealers
Leadership with...*



The Styleline De Luxe 4-Door Sedan

*FIRST...and Finest
...at Lowest Cost!*

You're FIRST with Chevrolet



plan to widen their **..THE NEW 1950 CHEVROLET**



INTRODUCING CHEVROLET'S EXCLUSIVE NEW
POWER *Glide*
 AUTOMATIC TRANSMISSION
 OPTIONAL ON DE LUXE MODELS AT EXTRA COST

Here, in Chevrolet for '50, are the finest values Chevrolet dealers have ever offered to the motoring public.

These thrilling new Chevrolets are available in 14 surpassingly beautiful Styleline and Fleetline body-types. They bring buyers and prospective buyers a choice of two great engines with two great drives—the Standard Power-Team and the Automatic Power-Team (at extra cost). And they also combine quality feature after quality feature of styling, riding comfort, safety

and dependability ordinarily associated with higher-priced cars, but found only in Chevrolet at such low prices and with such low cost of operation and upkeep.

Chevrolet dealers report that people everywhere are pronouncing these new Chevrolets the smartest, liveliest, most powerful cars in all Chevrolet history. That means that again this year, as in years past, Chevrolet dealers have the car that is **FIRST AND FINEST AT LOWEST COST!**

CHEVROLET MOTOR DIVISION, General Motors Corporation, DETROIT 2, MICHIGAN

...America's **FINEST Franchise!**





FOR HARD-TO-GET-AT repairs, such as where heat would destroy upholstery, and where bumping out is difficult—use Met-L-it.



CAR TRUNK DOOR is difficult to bump out. Fill trunk dents with Met-L-it. Sand smooth and paint.



LEAKING GAS TANK is easily repaired with Met-L-it—without heat—without emptying tank.

For Car and Truck Repairs



Met-L-it

and Met-L-it Fiber Mean

GUARANTEED PERMANENT ADHESION!

- SAVES LABOR COSTS
- SAVES MATERIAL COSTS
- NO SPECIAL TOOLS

Here's the roughest, toughest "cold metal" combination you've ever seen! Met-L-it and Met-L-it Fiber make metal repairs that stay in place through the hardest wear you can give them. Met-L-it means GUARANTEED PERMANENT ADHESION!

Met-L-it is highly workable, dries fast, can be sanded and feather-edged smooth; takes paint or lacquer without blistering. It's waterproof, rust-proof and withstands heat. Met-L-it is especially useful for hard-to-get-at repairs or in places where flame cannot be used.

Ask your jobber about Met-L-it today.

Met-L-it products are available separately or in handy kits.



PRODUCTS OF

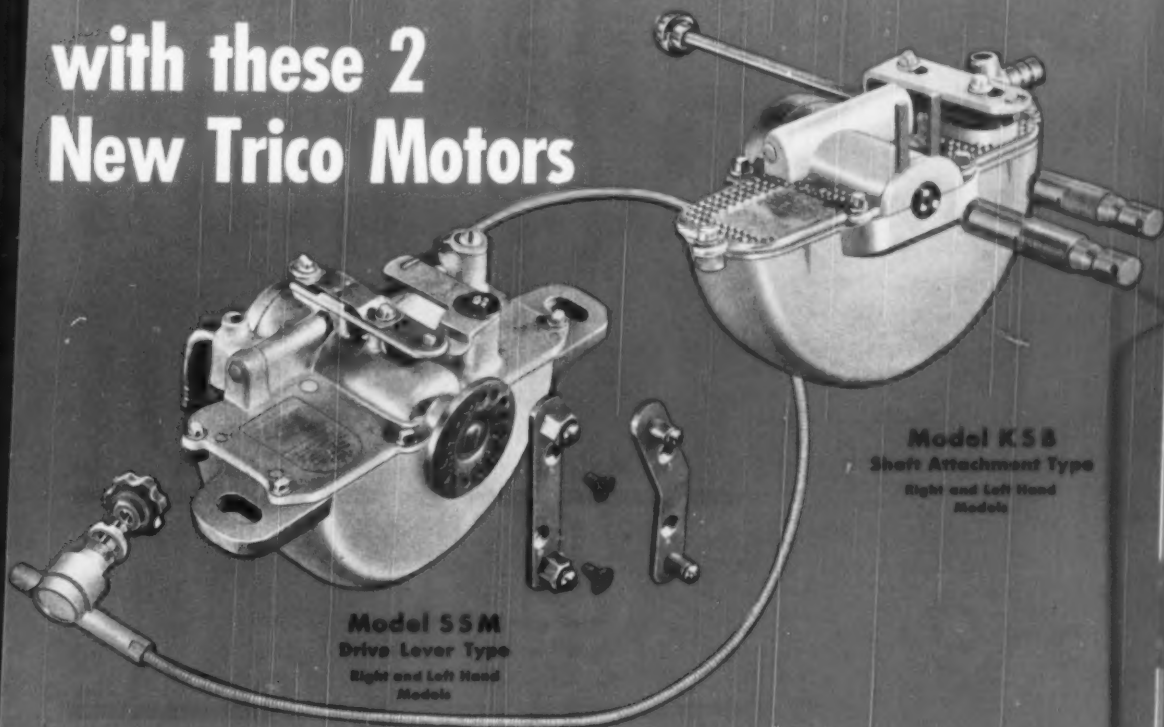
Hollingshead

LEADER IN MAINTENANCE CHEMICALS

E. M. HOLLINGSHEAD CORPORATION • Camden 2, New Jersey
Canadian Office: Toronto • Warehouses: Dallas, San Francisco, Chicago

Match 500 Motors

with these 2
New Trico Motors



**...they fit millions of cars
dating back to 1932**

To enable dealers everywhere to service the tens of millions of Trico-equipped cars now approaching "old age," Trico has developed these two new Universal-Interchangeable Windshield Wiper Motors.

With them...plus a kit of assorted shafts and drive levers...you can match over 500 Motor models dating back to 1932, all originally built by Trico. Trico Wholesalers carry complete stocks of replacement Linkages, Blades and Arms and will also continue to supply replacement Motors in original equipment styles. Ask your Wholesaler to show you the Universal-Interchangeable initial stock assortment.

TRICO PRODUCTS CORPORATION, BUFFALO 3, N. Y.



WINDSHIELD WIPERS

Copyright 1949, Trico Products Corporation, Buffalo, N. Y.

CHAMPION

→ ALWAYS SELL

→ MORE



Be a



DEALERS

SPARK PLUGS!

Champion Dealer

→ **IT PAYS!**

CHAMPION SPARK PLUG COMPANY, TOLEDO 1, OHIO

Listen to the CHAMPION ROLL CALL... every Friday night, over the ABC network

SOUTHERN AUTOMOTIVE JOURNAL for FEBRUARY, 1950



"Engineered" means—MADE FOR THE JOB

THE job may be passenger car, truck, bus, or tractor engine—there is a Monmouth Replacement Bearing designed and built for the service each must deliver. No other replacement bearing gives you this kind of tailor-made service.



Your NAPA Jobber is a Good Man to Know!

These bearings are made in the world's largest, most efficient and most modernly equipped engine bearing factory. Millions

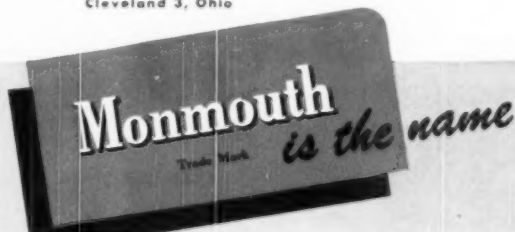
of dollars spent in research assure performance that matches every development in engine design and construction.

Minute-Man service on Monmouth Bearings and chassis parts is provided by N. A. P. A. Jobbers coast to coast.

For economy and perfect performance specify "Monmouth" when you require replacement bearings.

MONMOUTH PRODUCTS DIVISION
THE CLEVELAND GRAPHITE BRONZE COMPANY
Cleveland 3, Ohio

**FOR ENGINE BEARINGS
CLUTCH PLATES AND PARTS
CHASSIS PARTS**



America's Greatest Oil Salesman on America's

NO. 1 TV SHOW!

☆ Now in its second season . . . bigger and better than ever . . . none other than the Texaco Star Theater on television . . . No. 1 in popularity!

Milton Berle, now known as "Mr. Television," is master of ceremonies, and what a man! He downs his way through a sparkling weekly parade of famous guest stars.

This great show is now televised over 35 stations from coast to coast. Right now — an audience of more than 7 million anxiously awaits Tuesday nights. And the Texaco audience grows in leaps and bounds as the installation of new sets goes on at a rate of more than 150,000 each month.

The Texas Company backs its Texaco Dealers with top promotion . . . television . . . Metropolitan Opera broadcasts . . . magazine and outdoor advertising . . . window displays . . . direct mail . . . and other numerous dealer helps.

THE TEXAS COMPANY



MILTON BERLE,
"Mr. Television" himself



SID STONE and his familiar Texaco back-drop have won for Texaco the highest sponsor identification ever recorded by any show—radio or television.

**Now-TEXACO STAR THEATER TELEVIEWED
FROM 35 METROPOLITAN AREAS!**

Every Tuesday Night

Atlanta	Erie	Omaha	Seattle
Baltimore	Fort Worth	Philadelphia	Teldeo
Boston	Houston	Pittsburgh	Utica
Buffalo	Indianapolis	Providence	Washington
Chicago	Lancaster	Richmond	Wilmington
Cincinnati	Los Angeles	Rochester	
Cleveland	Milwaukee	St. Louis	
Columbus	New Haven	St. Paul	
Dayton	New Orleans	San Francisco	
Detroit	New York	Schenectady	



*No wonder TEXACO DEALERS
are such busy dealers!*

**A Great Line-up for
TEXACO DEALERS**

Sky Chief and *FIRE-CHIEF* GASOLINES

HAVOLINE and TEXACO MOTOR OILS MARFAK CHASSIS
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Announcing **THE NEW** **HEIN-WERNER**

HYDRAULIC

Swift-Lift



with "Triple-Choice"
load contact



Swift-Lift is the newest and most versatile lift on the market. It offers a choice of 3 load contact points to handle every job suitable to this type lift.

Either conventional hook or exclusive Knuckle-Joint Hook can be positioned for use by simple swivel arrangement. Safe clamp adjustment fits hook to any bumper height. Top Ram Head offers safe, extra-high lift especially useful for tractor and truck body work.

Swift-Lift offers greatest lifting range—from low of 3" to extreme high of 55". It lifts lowest built skirts clear of wheels quickly and easily. Exclusive Knuckle-Joint Hook permits positioning of jack *anywhere* on bumper regardless of bumper slots.

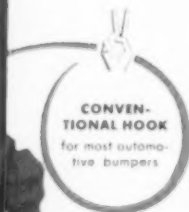
Call your Hein-Werner jobber or write us *at once* for full details.

- Triple choice lift versatility
- Large steel wheels for easy portability
- Greatest lifting range: 3" to 55"
- Slip-proof H-W safety clamp adjustment
- Aluminum base, ribbed for extra strength
- Exclusive Heinite long-wearing piston
- Fingertip release valve regulator
- Tested at 1½ times rated capacity

HEIN-WERNER CORPORATION
WAUKESHA, WISCONSIN



**TOP
RAM HEAD**
for truck, tractor, extra high lifts



CONVENTIONAL HOOK
for most automotive bumpers



KNUCKLE-JOINT HOOK
for hard-to-grip, streamlined bumpers

Hein-Werner also manufactures Bumper-Lift Hydraulic Jacks for passenger cars, Under Axle Jacks for trucks and buses, Cylinder Sleeve Fillers, Hydraulic Utility Units, Swift-Lift and Service Jacks for shop use.



World Bestos
SCOOP!

BIG RED

**SOLVES no. 1
HEAVY DUTY
BRAKING
PROBLEM!**



**for Heavy Duty
Trucks, Trailers
and Buses**



Guaranteed -

NO FADE

PLUS: *High Friction, Positive Braking . . .
Long Life, Reduced Heat Checking*

WORLD BESTOS RED BLOCK creates SENSATION!

Brakes can't fade . . . even with most abusive use under overload conditions! Glazing eliminated! Heat-checking reduced to minimum! It's the amazing new World Bestos RED BLOCK . . . proved by months of testing on toughest truck and bus runs in America. "BIG RED", drivers call it, brings in reports: "Perfect brakes . . . no fade, no heat-check, no glaze!" "45,000 miles and still going strong." "89,000 miles . . . far surpasses any other block used." "Answer to a truck owner's prayer!" "RED BLOCK creating a sensation here!"

Here's How It Works . . .

RED BLOCK, revolutionary new high-friction compound developed by World Bestos, can be used only in right combination with special-friction, World Bestos D Blocks. Resulting "J" Combination is guaranteed never to fade . . . guaranteed to reduce heat-checking and to give positive brake action . . . long wearing brakes under severest conditions.

"J" Combination Sets Now Available

Complete "J" Combination Sets, with installation instructions, now available to heavy duty truck, trailer and bus operators. Greater safety . . . big savings on maintenance costs apparent in every test case where service is abusive. Specify WORLD BESTOS "J" COMBINATION for original equipment or replacement. If local jobber cannot supply you, write direct to World Bestos, New Castle, Indiana.



DISTRIBUTORS . . . JOBBERS:

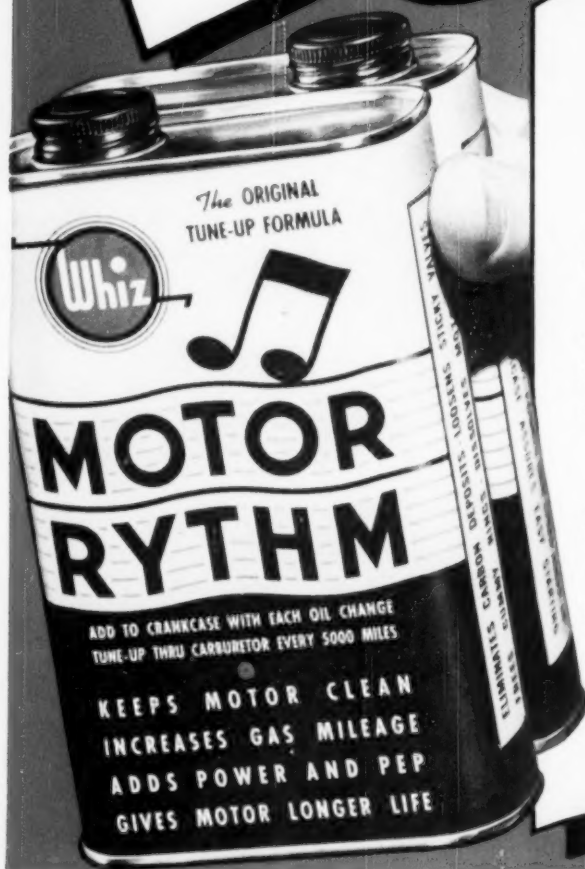
Get your share of this profitable heavy-duty market . . . with WORLD BESTOS! Write NOW!

WORLD BESTOS

**NEW CASTLE,
INDIANA**

SPRING TUNE-UP DRIVE!

1¢ Sale



MOTOR RYTHM®

Special Deal

SPECIAL 2 CASE PRICE \$11.04

REGULAR \$21.60 VALUE

YOU BUY...

24 Pints (1 case) at Regular Price.....	\$10.80
You Get 24 Pints for only.....	.24
Total Cost to You.....	\$11.04

SPECIAL 2-PINT RETAIL PRICE 76¢

REGULAR \$1.50 RETAIL VALUE

Sell 1-Pint at Regular Price.....	\$0.75
Offer Customer Extra Pint for.....	.01
Combination Costs Only.....	\$0.76

**DEALS MUST BE BOUGHT IN
FULL CASE QUANTITIES**

BACKED BY

FULL PAGE THE SATURDAY EVENING POST

ADVERTISING

To Create Demand FOR YOU!

**Order Now for Quick Turnover,
Big Sales and**

BIGGER PROFITS



PRODUCT OF

Hollingshead

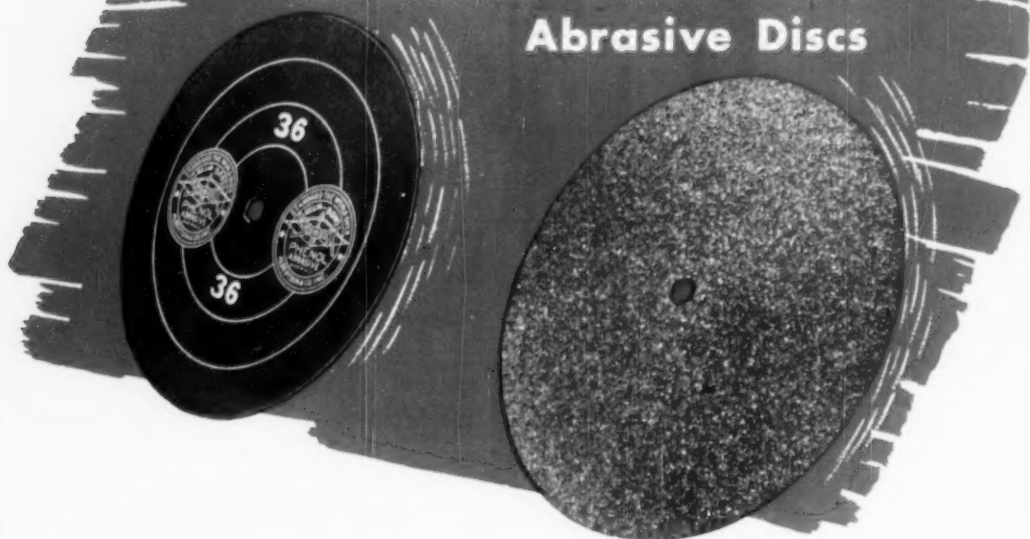
LEADER IN MAINTENANCE CHEMICALS

See Your WHIZ Jobber

E. M. HOLLINGSHEAD CORPORATION • Camden 2, New Jersey
Canadian Offices: Toronto • Warehouses: Dallas, San Francisco, Chicago

A Type for Every Purpose

SIOUX "RESIN BOND" Abrasive Discs



INDUSTRIAL HEAVY FIBRE

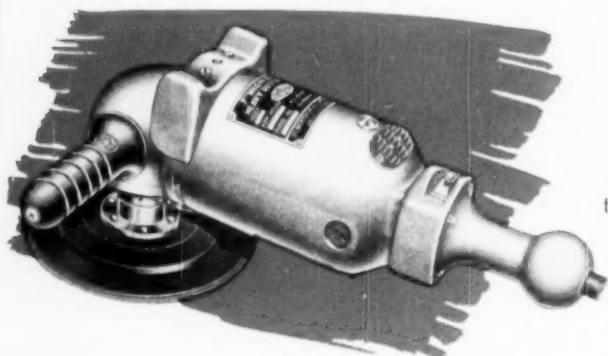
Industrial style abrasives suitable for heavy duty work, reducing welds, etc., and where heat generated is not a problem.

REGULAR STANDARD FIBRE

Built on lighter fibre than industrial abrasives and are intended for body work where light gauge metal is used.

OPEN COAT HEAVY FIBRE

For paint removal and cooler grinding on fenders, door panels, wood-working, etc. Non-Loading and Non-Clogging.



SIOUX HIGH SPEED SANDERS

Engineered and built for long trouble-free service. 3 Models:

No. 1250—9" High Speed Heavy Duty; No. 1267—7" High Speed Heavy Duty and No. 1265—7" Special.

Sold only through Authorized SIOUX Distributors

**STANDARD THE
ALBERTSON & CO., INC.**



**WORLD OVER
SIOUX CITY, IOWA, U. S. A.**

DURKEE-ATWOOD gives you ALL THREE for... GREATER V-BELT PROFITS

1

Fast-selling ASSORTMENTS WITH PRACTICAL DISPLAY RACKS

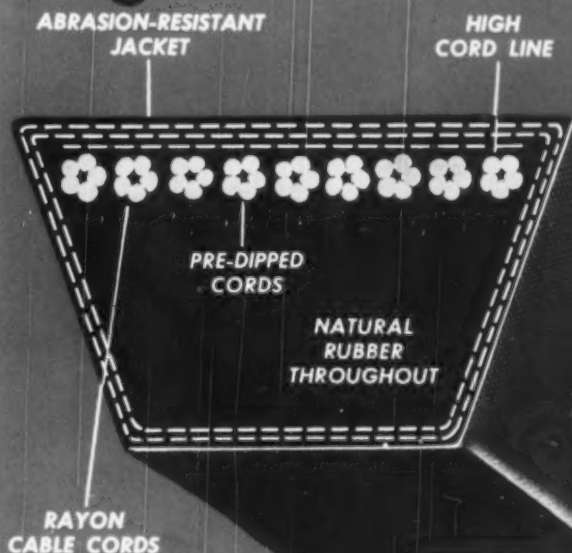
You profit most with high turnover of a moderate inventory. That's what Durkee-Atwood v-belt assortments do for you. With fewer belts you can service close to 100% of all demands. Durkee-Atwood colorful, enameled-steel wall racks take up no floor space, are easy to keep bright and clean. Sturdy steel floor and counter racks are available to fit your merchandising plans. Belt guides, size finder, and easy-to-use measuring sticks supplied with assortments.



2

A Line of Belts WITH 1949 ENGINEERING

Take a look at this cross section of a Durkee-Atwood belt. You can see the design and construction features that put this belt far out front in efficient power transmission. You can't see why Durkee-Atwood belts give service far beyond ordinary belt standards, but your customers will tell you that they do. Our own proving ground and road tests show that Durkee-Atwood belts consistently exceed ordinary belt wearing qualities.

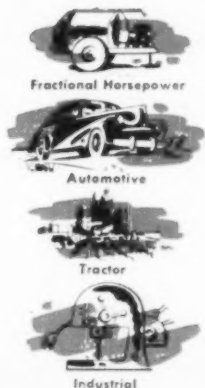


3

A Complete Line... V-BELTS FOR EVERY USE

Millions of v-belts are used annually for power transmission. Profit by these new markets with the Durkee-Atwood line. Durkee-Atwood makes v-belts for every purpose; automotive, tractor, truck, industrial and household. These belts are available in assortments to fit your most frequent demands.

FOR GREATER V-BELT PROFITS you need all three advantages of the Durkee-Atwood merchandising plan. Ask your jobber salesman or write direct for more information.



HIGH CORD LINE
REDUCES SLIPPAGE



Regular belt—
With low cord line, only a part of belt is under compression. Only a part of the belt works.

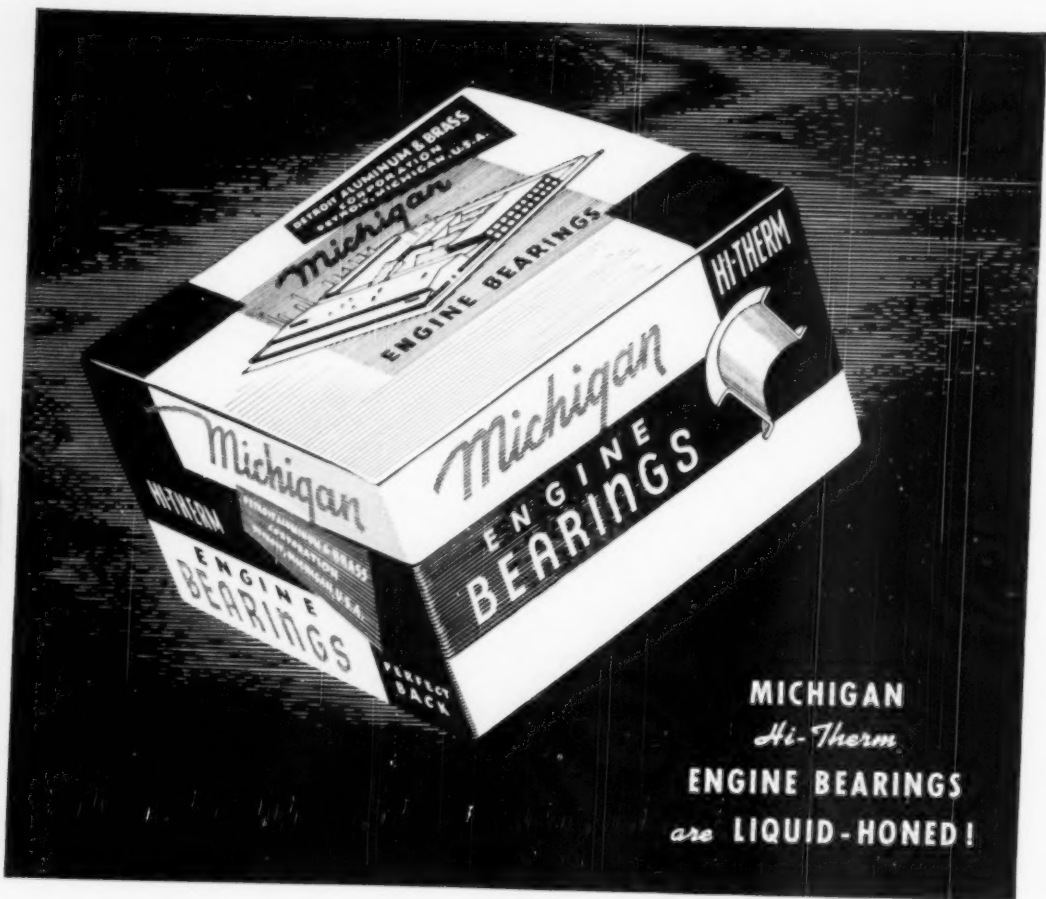


Durkee-Atwood belt—
Cord line placed high keeps entire body of belt under compression. All the belt is utilized against sheaves.

DURKEE-ATWOOD

COMPANY

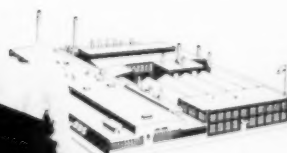
Minneapolis 13, Minn.



LIQUID HONING, one of the exclusive features of Michigan Hi-Therm Bearings, assures perfect fit of the back or foundation contact. This prevents distortion or flexing... provides uniform running clearance... and enables the bearings to disperse heat over the entire bearing foundation.

MICHIGAN HI-THERM ENGINE BEARINGS are easier to install... easier to adjust... eliminate local "hot spots" that eventually burn out ordinary bearings... and mean more profit on any bearing job!

Write today for further information to



DETROIT ALUMINUM & BRASS
CORPORATION
DETROIT, MICHIGAN, U.S.A.

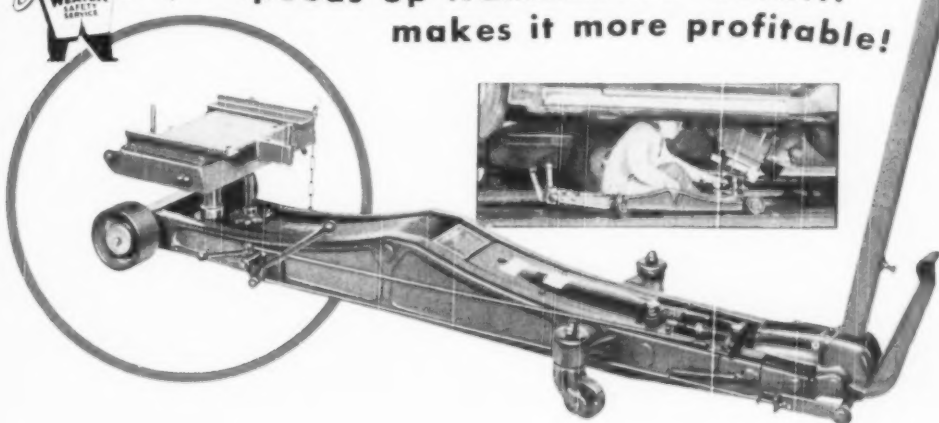
Manufacturers of Precision Engine Bearings for America's Finest Motors Since 1925



NEW **WEAVER** TRANSMISSION ATTACHMENT

FOR WEAVER LO-HI-DRAULIC JACKS

**speeds up transmission work...
makes it more profitable!**



A Weaver Transmission Attachment on a Weaver Lo-Hi-Draulic Jack is the new efficient way to remove and replace transmissions. It's the speediest, safest method when working right off garage floor. The attachment's special saddle has adjustable rails and pins, and chain to hold transmission securely at all times. Hand wheel adjustments permit table to be tilted or moved in any direction. High lift of Lo-Hi-Draulic Jacks raises transmission high enough to make unloading to bench a simple operation.

Control levers for raising and lowering jack are conveniently located on side of jack frame. Regular jack handle on Lo-Hi-Draulic Jacks may be removed when using jack for transmission service. Attachments for either WA-72 or WA-73 Lo-Hi-Draulic Jacks. Available as complete unit attached to jack or as a separate unit to equip

standard Lo-Hi-Draulic already in service for transmission work. Regular Jack Saddle also furnished when Jack and Transmission Attachment are ordered.

See your Weaver jobber or write for Bulletin SA-636 containing full details.

Model WA-72-TA	Model WA-73-TA	Model WA-76	Model WA-77
Weaver 2 Ton Jack with Transmission Attachment	Weaver 4 Ton Jack with Transmission Attachment	Transmission Attachment only for Weaver WA-72 Jacks	Transmission Attachment only for Weaver WA-73 Jacks

Weaver Manufacturing Co., Springfield, Ill., U.S.A.



**For transmission service with
WEAVER TWIN POST LIFTS...
WEAVER model EC-130
Hydraulic UNIT LIFT**

WEAVER

SERVICE SHOP EQUIPMENT

HEADLIGHT TESTERS

BEARS TESTERS AND WHEEL ALIGNMENT TESTERS

WHEEL ALIGNMENT TESTERS

WHEEL COUNTERS AND ALARMERS

TWIN POST LIFTS

COMPRESSORS

WHEEL DOLLIES

OLDSMOBILE ROCKETS TO RECORD-BREAKING PEAKS OF PUBLIC ACCEPTANCE!

Never before
in Oldsmobile experience
have New Models inspired
such enthusiastic reception!

From that first gala day when they went on display, the new 1950 Futuramics have proved a national sensation. Crowds . . . enthusiasm . . . showroom traffic . . . have shattered all Oldsmobile records. But the biggest raves of all have been saved for the cars themselves! "Rocket" Engine cars—with the most-talked-about power plant ever built! If hilarious Hydra-Matic cars—with a brand new achievement in transmissions—another Oldsmobile first! And Futuramic cars, of course! Cars with a thrilling new Fisher Body for the ultimate in interior comfort and glamor! "98!" "88!" "76!" They all took America by storm! And each of these new Futuramics offers incredible value. For example: The brilliant new "88" Oldsmobile now comes at a new, even lower cost! That's one more solid reason for the remarkable public response to Oldsmobile's magnificent new models. And that's one more reason why Oldsmobile dealers everywhere are ready and eager to—"Rocket Ahead with Oldsmobile in 1950!"

Typical Dealer Reaction to the New "Rocket" Cars!

"Finest showing in Oldsmobile history!"—HARRISBURG, PENN.

"4000 people crowded through showrooms in past 48 hours!"—OAKLAND, CALIF.

"Best looking car on the market—Head and shoulders above competition!"—CHICAGO, ILLINOIS

"Showroom jammed with more than 3,000 excited Denverites!"—DENVER, COLO.

"All 1950 models superb. Demand for new cars terrific already!"—PORTLAND, OREGON

"Greatest reception in 18 years—The new Futuramic fleet is a sensation—Congratulations!"—PATERSON, N. J.

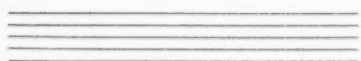
"What a car—what a year 1950 will be for Oldsmobile dealers and salesmen—Crowds tremendous—Police called to regulate traffic!"—CANTON, OHIO

"1800 people in two-day showing—marvelous reception of outstanding car of 1950!"—SAN FRANCISCO, CALIF.

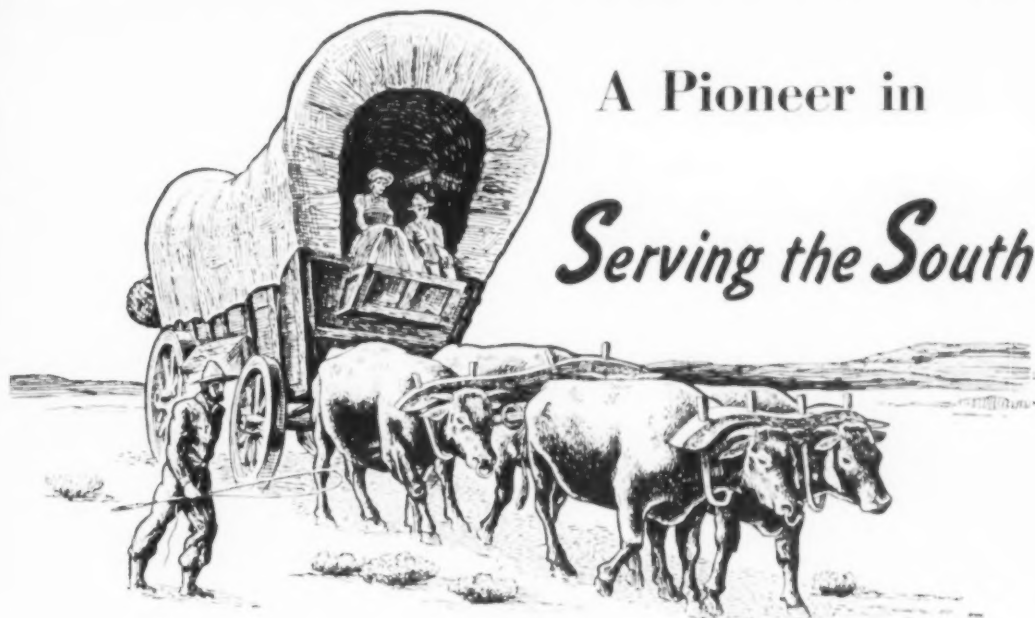


A General Motors Value

ROCKET AHEAD WITH OLDSMOBILE!



Federated Mutual...



A Pioneer in

Serving the South

with

COMPLETE Fire and Casualty COVERAGE for HOME – BUSINESS and CAR

- Federated Mutual has pioneered multiple line coverage for the Southern automotive trade. Now you may enjoy the convenience of complete worry-free protection for your business, home, and car, all in one MUTUAL company. You will enjoy too, substantial savings in the form of dividends.
- Federated Mutual has pioneered in serving today's special insurance needs of the automotive trade. Your Federated representative is a specialist in providing men in your business with the PROPER coverage on FIRE and CASUALTY insurance. He is highly trained in your needs and represents no other company.
- There are Federated Mutual representatives throughout the South ready to give you their skilled, friendly service. Write us for the name of the Federated Representative nearest you!

Federated  *Mutual*

MUTUAL IMPLEMENT AND HARDWARE INSURANCE COMPANY

1600 Healey Bldg.

ATLANTA, GEORGIA

New "Bull's Eye" carton is packed with sales appeal!

Heat dissipates faster.

"Split" construction eliminates "humping" (warp).

Ground on reverse side so that wire grid is exposed, in order to make direct contact with brake shoe.

"I'M A RED HOT PROSPECT FOR AMCO DELUXE SETS!"

Safety-minded car owners are glad to pay more for a DeLuxe brake job! The correct combination of MOLDed friction linings makes every stop a DeLuxe stop with AMCO DeLuxe Brake Lining Sets!

True arc for proper application to brake shoe!



DEPEND ON

WHAT A LINE!
WHAT A LINE!

Yes sir, "Miss Bumps" has the line that can help you put the "whammy" on slipping sales! It's the AMCO *Safety Rated Line*...the line that's got EVERYTHING for EVERYBODY, from rich man to poor man—and those in-between.

You get MORE REPEAT BUSINESS and MORE CUSTOMER GOOD WILL with AMCO. All AMCO Products are *Safety Rated* 3 ways. First, through 25 years EXPERIENCE as one of America's important suppliers of original equipment brake lining for cars, trucks and industrial use. Second, by billions of brake miles under every service condition, which are behind the ENGINEERING of every piece of AMCO Lining. Third, through the latest MANUFACTURING methods in one of the country's most modern brake lining plants.

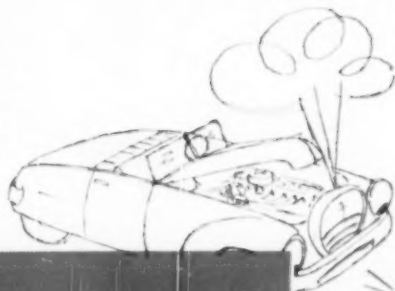
FREE 4-color "Miss Bumps" PIN-UP to brighten up your shop... and a lot of PLUS-PROFITS to fatten up your cash register! Both are yours with AMCO! A penny postcard with your name and address will bring "Miss Bumps" to you PRONTO!

ASBESTOS MANUFACTURING COMPANY, DEPT. B-9, HUNTINGTON, INDIANA.

B-1001 Copyright 1950 Asbestos Mfg. Co.

"CAN I AFFORD TO GET SAFETY RATED?"

Why, lady, EVERYONE can afford a topnotch *Safety Rated* brake job! Re-sale prices on Wire-Back Brake Lining make it possible! Every Wire-Back Set is not only priced right, but also made right and packaged right!



"WHY DIDN'T SOMEBODY TELL ME?"



DON'T GO WHAM!

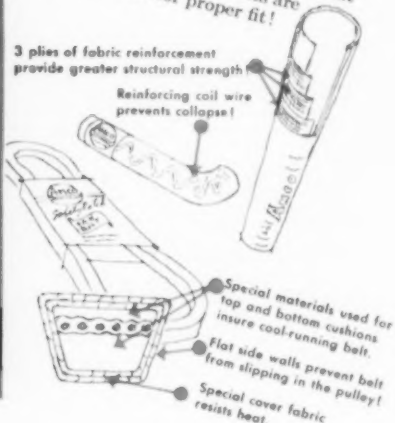


AMCO *Safety Rated*
BRAKE LINING

Somebody, quick, tell "Miss Bumps" that with AMCO Hose she won't have to worry about destructive action of rust, anti-freeze or hot water... tell her also that AMCO *Safety Rated* Fan Belts are PRE-STRETCHED for proper fit!

3 plies of fabric reinforcement provide greater structural strength

Reinforcing coil wire prevents collapse!



Special materials used for top and bottom cushions insure cool-running belt.

Flat side walls prevent belt from slipping in the pulley!

Special cover fabric resists heat.

for **PLUS-PROFIT PERFORMANCE** depend on

AMCO

Safety Rated Brake Lining

FAN BELTS • HOSE • BONDING OVENS • CAR MATS • CLUTCH FACINGS

A good point to remember:



When you *must* replace the points in a Delco-Remy distributor, use *only* Delco-Remy contact points. They are designed by Delco-Remy engineers as integral parts of the Delco-Remy ignition system and are made from the best materials obtainable. Buy Delco-Remy contact points in packaged sets; there's a right type for each Delco-Remy distributor.

WARNING:

To be sure of getting Delco-Remy contact points, buy them from recognized distributors.

Delco-Remy

DIVISION, GENERAL MOTORS CORPORATION
ANDERSON, INDIANA

**USE
DELCO-REMY
DISTRIBUTOR
CONTACT
POINTS
IN
DELCO-REMY
DISTRIBUTORS**



DELCO-REMY—A UNITED MOTORS LINE
Available Everywhere Through
UNITED MOTORS DISTRIBUTORS

WHEREVER WHEELS TURN OR PROPELLERS SPIN

**How to make
more money
for Yourself
and do a
better job
for your
Customers!**



The New McQUAY-NORRIS **PERMASIZER**

A NEW REVOLUTIONARY METHOD OF RESIZING PISTONS

Only your McQuay-Norris jobber has the Permasizer. He can give you quick, efficient service and help. Ask him for details. It's to your advantage.



- | | |
|---|---|
| 1 More permanent and accurate resizing | 5 Does not artificially build up stress in piston skirt |
| 2 All pistons in a set uniformly expanded | 6 Resizes aluminum, iron and steel pistons |
| 3 A heat expansion and reshaping process | 7 Restores original shape and cam |
| 4 Uniform expansion with pressure exerted independently against top and bottom of skirt | 8 Does not deface surface of piston nor swedge metal |

**IT'S QUICK — IT'S ECONOMICAL
... IT'S A MONEY-MAKER!**



McQUAY-NORRIS MANUFACTURING COMPANY
ST. LOUIS 10, MO.

**HASTINGS USES CHROME
WHERE IT DOES THE MOST GOOD
... ON THE OIL CONTROL RING!**



THE CHROME-FACED STEEL-VENT FOR HEAVY DUTY USE

No set of piston rings is ever better than its oil ring. Compression rings just can't function after the oil ring is worn out.

So Hastings gives you chrome-plating where it is most needed—on the oil control rings!

The Chrome-Faced Steel-Vent and its companion ring, the Chromlube, are doubling and tripling expected life of piston ring sets under some of the most

difficult operating conditions in the heavy duty field. Two years actual field experience prove this.

For longer life, greater resistance to scuffing and less cylinder wall drag, install a Hastings Chrome Set. Available for nearly all trucks and tractors and for 16 passenger cars.

HASTINGS MANUFACTURING COMPANY • HASTINGS, MICHIGAN
Hastings Ltd., Toronto



HASTINGS

**STEEL-VENT
PISTON RINGS**

CHROME-FACED FOR HEAVY DUTY SERVICE

SOUTHERN AUTOMOTIVE JOURNAL

Covering Automotive Sales and Service

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VISION AHEAD

INSIDE WINDOW WIPER

Here is the greatest sales item that the automotive industry has ever seen! This handy inside window wiper will clear the way for better driving for thousands of motorists, particularly during the cold winter months ahead. It cleans off steamy windshields in a jiffy. Easily attached to any glass surface.

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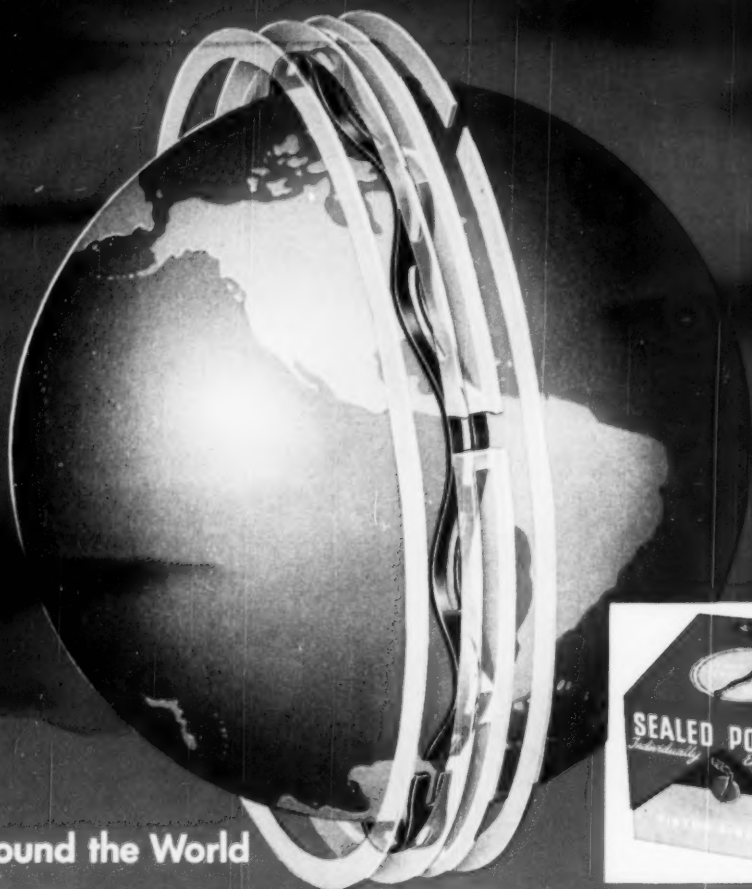
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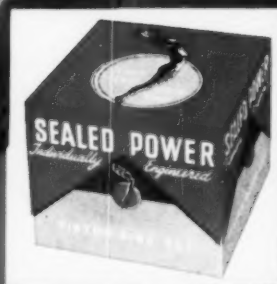
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DOES THE WORLD'S BEST JOB OF OIL CONTROL EVEN IN

BADLY TAPERED AND **OUT-OF-ROUND BORES!**

DOUBLE THE DRAINAGE WITH HALF THE DRAG!

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BEST IN NEW CARS

BEST IN OLD CARS



SPOTLIGHTING the NEWS

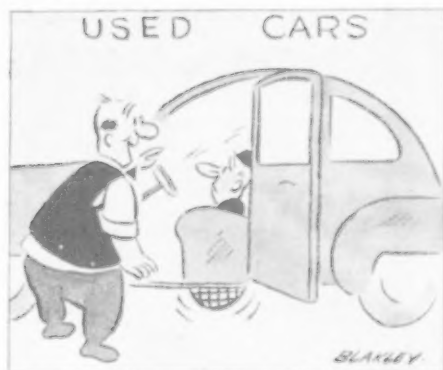
Are you really selling service? A lot of garage-men probably think they're selling service when they keep checking up on their past performance records and find that the volume is holding up pretty well for the previous comparative periods. But if you think the shop is being promoted fully, consider what one quite prominent southern jobber said last month.

His answer was a grimace and an apology. Garage-men are trying to sell as best as they know how, in many cases, but they're not taking advantage of a lot of help which the jobber is trying to tender to his trade. "I've been waiting seven months already while trying to get a list of customers of one of my accounts to whom I have offered to send some direct-mail pieces especially designed for this trade. We had offered to do this on our own to him to help build his volume, but he has kept putting off getting the list when we mentioned it."

Car sales also are going to be foremost in a lot of minds from here on out, if you're to believe what the experts say. Said GMC Board Chairman Alfred P. Sloan, Jr., last month: "If I were to chance an opinion, I would say that the automotive industry is likely to enjoy in 1950 a volume approaching that of 1949. Any change in trend is likely to manifest itself in the second half." Ford announced a produce-as-hard-as-we-can schedule also. A record schedule of more than 600,000 Ford passenger cars "calls for the maximum use of all of our facilities, including considerable overtime at all plants," said President Henry Ford, II. And Chrysler Corp., as well as the independents, was generally geared up by this month for full-speed ahead output.

Texas is a good example of what the record '49 production meant to the South. During last year 2,700,324 motor vehicles were registered in that state, compared with 2,289,183 for 1948—an increase of 411,141. Since the war, dealers in the Lone Star State have been investing an average of nearly \$30,000,000 a year in facilities, it has been estimated. Even for Texas—whose area would "cover" Georgia more than four times or "swallow" South Carolina nearly nine times—that's a lot of cars and a lot of money.

State sales taxes, considered more and more a source of revenue since Uncle Sam pretty well bottled up the personal income-tax business, can be a headache. Latest example is in North Carolina where the revenue commissioner announced a move which will increase sales-tax collections from automobile sales by approximately 50 per cent. A new regulation has the vehicle taxed as it is produced and listed at the factory as one article. Additional equipment, such as radios, heaters and seat covers, are to be taxed extra at three per cent. The difference comes in the fact that a maximum sales tax of \$15 on a single article is permitted. Classed as several "articles" rather than as one, the car will easily produce more revenue—and headaches—for the state and the dealers, respectively. Alabama has been having its share of state tax troubles, too, and a move was launched for a state sales levy in Georgia but it failed.



"How's that seat for sheer luxury? Like riding on air, isn't it?"

How mad? The public is really mad at the automotive business—madder than I have ever seen the public before. That's what one southern dealer said last month as he reviewed the current picture. "One man walked into our showroom, said he knew that a lot of dealers had not been fair when cars were hard to get and then announced that he was ready to give us his '49 car and \$250 for a '50 model. Then he told us 'You're going to take this offer and be glad to get it.' The deal wasn't closed on those terms, the man left in a big huff and behind him were some of

the sizzling "compliments" for the automotive fraternity in general.

An answer may have been found by you—an answer dug up by experimentation. If so, let us hear about it as everyone stands to benefit by counteracting this situation.

Pass it on! After receiving suggestions from readers from scattered sections of the South—as far, in fact, as from Oklahoma to Virginia—the editors have decided to insert on the cover of this magazine (beginning this month) a check box designed to facilitate the passing around of each monthly issue to the interested persons in your company. Read it (we hope) and then pass it on, but do please be sure to shove it right along to the next man in your organization!

Add to customers' satisfaction with

MOPAR

CYCLEBOND BRAKE LINING



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INSPECTED



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by Chrysler
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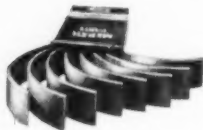
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No Rivet Holes!
Up to 75% Longer Wear!**

Bonded directly to brake shoe! Your customers enjoy safe, sure braking virtually down to the brake shoe.

More effective braking! Surface intact from one end to the other. More lining area in contact with drum.

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Pre-cemented MoPar Cyclebond Lining Sets. For all cars and trucks built by Chrysler Corporation. Ready for bonding to brake shoes.



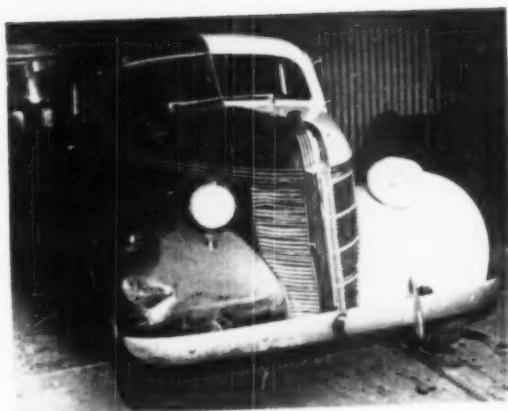
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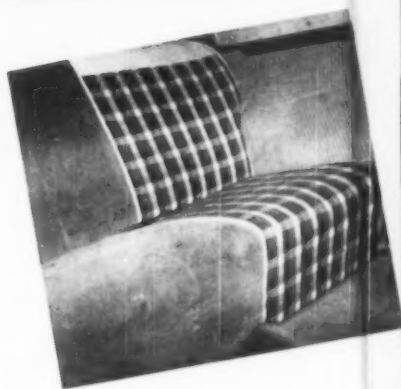
FOR

**PLYMOUTH • DODGE • DE SOTO • CHRYSLER
CARS • DODGE "Job-Rated" TRUCKS**

...and from most independent garages



Try Reconditioning for Added Profits



IN these days it's hard for a garage or dealership to devise an attention-getting service promotion without spending a lot of money. It's also hard to advertise a number of services adequately without exceeding the budget. Many advertising and promotional schemes are competing for motorists' attention and repair jobs.

A Florida firm hit upon an idea which not only catches the customer's

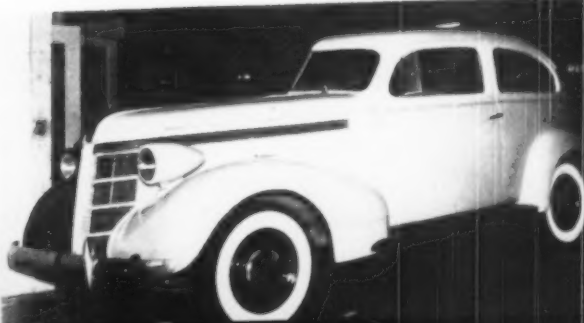
eye but also sells him a number of services. And the plan is not expensive, especially over a period of time. The details follow.

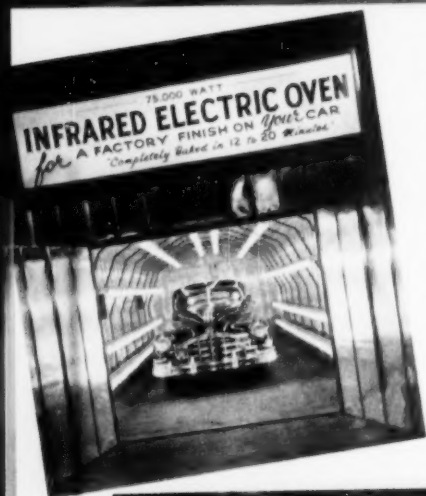
One morning at a staff conference, Eugene R. Elkes, president of the Elkes Pontiac Co., Tampa, startled his workers with a request for the oldest Pontiac still running that they could find in the city.

They found it—a 1937 two-door sedan with more than 100,000 miles

By Bill Abbott

The pictures on this page show why the half-and-half "Miracar" has been stopping traffic and selling Elkes reconditioning service to quite a few Floridians.





on its odometer. It was then ready for the junkpile, but was still running. It needed bumper-to-bumper repair. Its engine was rusty, ignition bad, windshield fogged and broken, fenders and body dented, running boards broken, upholstery shot, window-glass channels out of commission, trunk interior rusting away, bumpers pitted and rusted and a home-made paint job that was disgraceful. There was hardly anything that could happen to an automobile that hadn't happened to this one. But it was just what Elkes wanted.

He gathered his staff again around the tired old jalopy and outlined his idea for a long-range sales and service

program that since has paid dividends and is adaptable to profitable use by any automobile dealer with imagination who wants to build his shop volume.

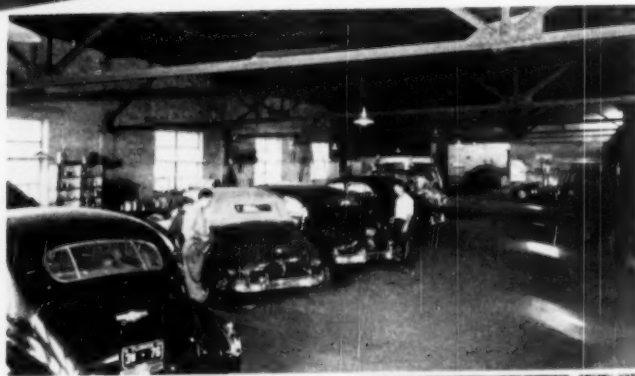
"We are going to use this car," Elkes explained, "to visualize and dramatize a brand new and better service to our customers.

"As you all know, the automobile business picture has changed. Short ages are over. From now on we must look for our customers instead of having them look for us. We have forecast and recognized this trend for many months. We have added more skill to our organization. We have added new equipment to enable our staff of factory-trained mechanics to do better work. We have increased our facilities to better serve our customers.

"In our plans, we have sought a name for a type of superior service which we have the men, materials and facilities to offer. We have adopted 'Elkes-onized Certified Service' as best expressive of our product.

"'Elkes-onized Certified Service' sums up a program that assures a customer his money's worth in good workmanship and materials, courtesy and appreciation of his patronage—and a definite guarantee of satisfaction."

(Continued on page 134)



Photos (top to bottom):

Sales at this building went over \$1,000,000 last year, with a lot of credit for that total going to the reconditioning promotion.

This oven for baking enamel is one of 15 departments advertised by renewing half an automobile.

This is just one section of the five modern service department.

Just as the "Miracar" sells reconditioning to customers, this picture of President Eugene R. Elkes should sell the promotion idea to other dealers and garagemen.





All new-car customers are taken on a complete "demonstration" tour of this modern service department before signing purchase papers for the car.

General Manager Bill H. Hughes (left) and Newt Hailey give the shop demonstration program much credit for doubled service volume.

We Get Customers by Selling Them on Our Service



TAKING over a dealership that went broke four times under other owners called forth some dire prophecies 14 years ago.

"You can't make it, Hailey," The new boss, who had been a high-production salesman since Model-T days, had to listen to a lot of that sort of conversation.

Newt Hailey has "made it." He did it all with plain, hard-driving selling and by "demonstrating" his service department in the same way he demonstrates a new car to a prospective buyer.

Under Newt Hailey's direction, the Hailey Motor Co., founded in 1935, has grown into one of the city's largest organizations, with an annual payroll of nearly \$75,000 and a permanent staff of 26 employees—all housed in what customers say is one of the handiest and most modern automobile sales and service plants in the state.

Newt Hailey is enough of a showman to make people talk about his new building, a building unusual in a town of 6,000. But before he is a

By **BILL HUGHES**
General Manager, Hailey Motor Co.,
Rogers, Arkansas

showman, he is a salesman. Well-laid sales plans extend from the display floor to the used-car department and

settle solidly in the big back area labeled "Service."

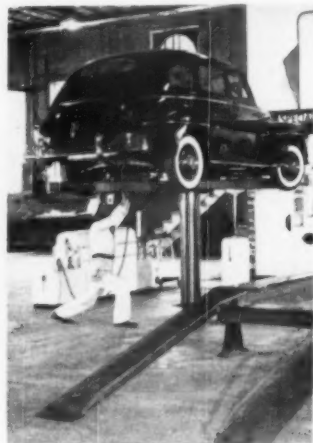
Service and sales simply cannot be separated in the Hailey organization. When a car is sold, whether new or used, the customer is made so completely conscious of our service depart-





Serving the careful way in which older models are reconditioned and spruced up increases a customer's confidence in the service force.

Free lubrication books for new-car buyers help them form the habit of going to Hailey for service and keep the lube rack busy.



ment that it would be rather remarkable if he did not do his bit toward adding to our constantly growing service volume.

We allow no one to buy a new car without getting a complete demonstration prior to signing an order. The predetermined route, approximately 12 miles long, includes all kinds of driving.

Back at the plant after the demonstration, the salesman lifts the hood and points out and explains the power plant, cooling and heating equipment and other details.

"Now come to the service department," he tells the customer. "We want you to meet the boys back there."

The service shop is given a demonstration as complete as the car itself has just received. All the equipment is pointed out and explained. The service manager, Jake Frederick, points out his trained mechanics, cleanliness and the new car pre-delivery servicing done to every new car before delivery.

After that complete demonstration that puts the plant as well as the car on parade in detail, 85 per cent of all our customers sign the order.

But we're not through with the customer yet. He has signed on the dotted line. Now he is again taken to Service Manager Frederick, who hands him a free lubrication and inspection coupon book.

"This book is our warranty of completely satisfactory operation of your car," he says. "If anything about the car puzzles or disappoints you, report

it to me immediately."

This elaborate demonstration was designed to leave the customer impressed with one fact: We are as much interested in him and the car he purchased as we were when he was only a prospect.

Maybe that last clincher to our sale is the reason for our healthy growth. We hold on to the customer.

We don't call the service department a necessary part. It is a profitable operation with us that adds plenty of dollar volume. All our employees sell service. That includes the new and used car sales force, the parts department, service department, the owner, the management and the office personnel. The entire staff is sales-minded.

Uses Daily Control

Our service manager and parts manager have daily operating controls showing each his daily accumulated attainment against his quota for the month. This, of course, is broken down according to departments.

Proof that pushing and promoting service pays is the fact that since we moved into the new building nearly two years ago and started our current intensive sales program in service, our service volume has doubled. The shop is always full.

Our rule is that the service manager and all service people must be young and aggressive, highly trained and constantly trained. They must have above-average personalities and the ability to get along with other employees. They must like to make

friends and meet the public.

Newt Hailey works harder than anyone else in the organization. He's right in there selling all the time—selling new cars and trucks, used cars and trucks, tires, parts, service or just selling good-will.

In a small town it is important that the key people in the management of a dealership belong to service clubs and civic organizations. Mr. Hailey is past president of the Chamber of Commerce and is an active member of service, civic and social clubs.

When he constructed our new building two years ago, he made it a credit to the town. The building is really a part of our current sales plan, set up to assure continued growth and prosperity for our firm. Many people of Rogers feel that we symbolize the town's growth. And that is exactly the impression we want to have on our 6,000 inhabitants.

Some people say that in a town of our size a dealer doesn't have to advertise because everybody knows him. We believe that we should remind everyone that he knows us or should get acquainted. For us, advertising has paid off.

Our advertising is broken down into three categories—new unit sales, parts and service sales and good-will. Our four advertising media are newspaper, radio, road signs and direct mail. We strive to make our newspaper advertising entertaining. It must also sell something definite in one of the three categories.

The sustained-market radio program
(Continued on page 139)



Paying Mechanics a Higher Rate

It has paid off, says an Alabamian who also keeps fishing poles ready when a mechanic wants to use them.



Top photo: The mechanic's yearning to wet a line can be satisfied just as soon as fishing weather arrives. Owner W. N. Eley will gladly give him time off.

Above: Pay day is always a happy time, especially since those checks being handed out by Eley (center) are for two thirds of the company's total labor charge.

MECHANICS at the Eley Motor Co., Union Springs, Ala., receive two thirds of every labor dollar they earn—55 1/3 per cent more than the 50 per cent of labor paid in many shops.

They get a week's vacation with pay, based on their average weekly pay check, and when the fish are biting, any employee may take the afternoon off for a bit of angling. In fact, Owner W. N. Eley is apt to make the suggestion.

This program may sound like a story-book set-up for mechanics, but the plan has a happy ending for the owner too.

Eley, who has been a dealer for 35 years, said his extra liberal profit-sharing plan and employee relations program have won him a much better and more economically operated shop. The extra dollars the men are paid are more than recovered through in-

creased volume and efficiency.

Labor turnover has been cut to the bone. One employee has been on the payroll for 26 years, another for 11 years. The average length of service for all hands is five years.

Mechanics Keep down Costs

"My men aren't just happier and better workmen," Eley explained, "but they are interested in saving me money as well as making it for me. I am able to keep operating costs extremely low because each mechanic is conscientious about taking proper care of tools and in not losing supplies. They know that I must keep my overhead down if I am to continue paying them such a high share of profits."

"Every one of my employees considers himself a partner in the business—and I consider him in the same manner. They go out of their way to make sure a customer is satisfied

or to save the company a couple of dollars. They are constantly thinking up better ways of doing jobs in the shop. I make no rules. The men make them and I have no trouble at all."

Until about a year ago mechanics received 60 per cent of labor. Then Eley increased their share to two-thirds. Although it is a small firm in a small town, the four mechanics now average \$75 a week.

"With the cost of living rising steadily at that time, I felt it the only fair thing to do," Eley said. "I did not increase the mechanics' earnings merely in an effort to hold them. I think most of them would have stayed anyway. However, these men are entitled to a decent standard of living and I wanted to assist them as much as possible in maintaining it."

The extra labor percentage above
(Continued on page 132)

Baby-Sitters Sell His Used Cars

Many parents who temporarily trade a baby for a set of car keys take home a four-wheeled bundle of joy.



Junior might be happier over Mrs. Carr (left) if he knew she would help him get a "buggy."

TO most persons there is little or no connection between baby-sitting and used car sales, but to imaginative young John D. Carr, manager of Hargrove Motors, St. Petersburg, Fla., the two have been linked into a profitable promotion venture.

"Exclusive with Hargrove Motors," said one of his newspaper classified advertisements, "Trained baby-sitters while you drive our Red Star warranty automobiles."

The ad offered experienced baby-sitters while father and mother, or either of them, were driven to the Hargrove lot to look over cars, or

while a Hargrove car was being demonstrated.

It could have been just a gag and resulted only in a baby-sitting joke, but it paid off for Hargrove, and Carr discontinued it only after it had outgrown its usefulness.

He recommends it to dealers in both new and used cars wherever it hasn't been tried.

Besides being a good advertising novelty, he said, it is practical and effective.

Carr, a young Army veteran who was bucking stiff competition in a city where business is seasonal, hit

upon the idea through a double-barreled set of circumstances.

"I was new in St. Petersburg," he explained, "and I was trying to become known. I lay awake at nights trying to think up something to get people to come on the lot and see our cars."

"And I was trying to get away from screwball advertising—such as a picture of a guy with a rope around his neck, saying 'I'll be hanged if I can't give you the best deal.' That's the type of stuff I was trying to avoid."

"Then, at about that same time, we

(Continued on page 131)

Manager John D. Carr helps a customer into a used car in which she is interested. Mrs. Carr has the child in hand so the customer can concentrate on the car.

At the end of a successful demonstration, free from annoyance and distraction for both salesman and customer, the papers completing the sale are signed.



A similar set-up for renting passenger cars to doctors and salesmen is planned in April.

— By —
Beatrice Miller



Phillips' Truck Rental Plan Yields Profits

The Joseph Phillips Motor Co.'s Rent-A-Truck advertiser is well known to Alexandrians as it cruises along the streets of this city.

A PRACTICAL demonstration of what it means in dollars and cents to rent a truck was presented to local truck owners when the Rent-A-Truck plan was launched by the Joseph Phillips Motor Co. of Alexandria, Virginia.

"People have to be educated to the idea that it is cheaper to rent a truck than to own one," said Joseph Phillips, whose success with truck rentals has encouraged him to embark on a car-rental plan to be inaugurated this spring.

Accordingly, the salesmen who cruised the streets of Alexandria in the Phillips Rent-A-Truck vehicles approached local truck owners with this in mind.

First, they pointed out, renting a truck eliminates capital investment. It eliminates insurance expenses. There is no cost for maintenance nor any personal property tax. The dealer pays for everything but gasoline and oil while the truck is being operated on a rental basis. Nor is there a mileage charge until after 25,000 miles.

The program opened with an educational campaign in comparable op-

erational expense between truck ownership and truck rental.

When applicants for truck rentals began coming in, procedure was the same as in the case of any person applying for credit. Applicants were checked with the Credit Bureau to determine risk. Upon a satisfactory report, a contract was drawn up between the Joseph Phillips Motor Co. and the lessee.

The contract covered a period of 30 months at \$75 a month for a 1/2-ton panel or pickup. The rates rose according to special equipment or kind of vehicle. Mileage in excess of 25,000 was to be at four cents a mile, plus the regular rental charge. Rented trucks are protected by fire, theft and \$100-deductible collision insurance.

Phillips arrived at the rental rate of \$75 monthly by using the retail selling price of the unit plus one third, which represented the mark-up or operational expense, then dividing that by 30 months and rounding out the figures.

If at the end of six months the trucking firm wants to purchase the truck, it can be bought at list price

plus the unused insurance cost, with an allowance of 75 per cent of rental paid.

The plan caught on. More and more truck users were applying for rentals. A newspaper story in the local paper on what the Phillips Motor Co. was doing stirred up more business. An attractive blotter describing the plan went out to prospective truck renters.

Dump trucks are excluded from the program because the damage to the truck in six or seven months will use up the value of the truck. Investment in a dump truck would have to be made up in six or seven months. To take care of this, rental rates would be prohibitive.

During the 30-month period of operation the truck is inspected monthly and serviced by the Phillips Co. Servicing is handled as rapidly as possible so that there is little loss of time to the trucker. Emergency repairs that may have to be done elsewhere on the road are not paid for by Phillips unless approved first.

Rent-A-Truck is a profitable plan that works out satisfactorily for trucker, dealer and factory.

Here are the figures for trucks rented by Phillips.

At \$75 a month for a 1/2-ton panel truck for 30 months, the income will be \$2,250.

It costs the dealer the first year for truck and expenses.

1/2-ton panel	\$1,250
Insurance	150
Lettering on truck	25
License plates	20



Truck-Renter Phillips, a Dodge-Plymouth dealer, stands by a new lettering job on a rented truck.

First-year maintenance 120

\$1,545

Income on the truck the first 12 months at \$75 monthly is \$900.

It costs the dealer \$1,545, so he has \$645 to make up the second year.

During the second year the income will be \$900. The dealer's expense will be:

Insurance 8 130

Maintenance 240

License plates 20

\$ 390

Carry over from first year 645

\$1,055

Deducting \$900 income from this, the carryover at the end of the second year will be \$155.

In the six months remaining of the 30-month contract, the income will be \$450, less the carryover of \$155. The net profit will be \$315 plus the value of the used unit.

A second corporation should be formed for the rental operations so that all expenses and tax benefits can be shown and advantages taken there of. For if the truck's rental profit is low and dealer profit high, units can be sold to the rental corporation at cost or vice versa. If the rental profit is high and dealer profit low, you can sell to rental corporation at list.

"There is nothing new about the truck rental business," said Phillips, who modestly disclaims any credit for his enterprise and initiative. "In large cities it's big business renting trucks. A number of large corporations rent rather than own trucks."

He undertook renting trucks because he believed the lush period of selling trucks was over. Rentals became an outlet for trucks the factory expected him to take. For him the rental plan means no truck inventory. It has increased his parts sale volume. At the same time he has built up his repair service. The plan takes care of idle time in the shop.

On the basis of results, Phillips plans expanding rental to passenger cars to local physicians, contractors, local salesmen and other professionals dependent on transportation.

Expanding in April

The same practical appeal will go out to them some time in April when it can be determined what car production will be. To a doctor or salesman the advantages of renting a car will be similar to those of the trucker—an capital investment or depreciation. He gets all repairs free. He doesn't have to pay for tags, personal property tax, sales tax or insurance.

Passenger car rental will operate on a shorter term contract—only 12 to 15 months at \$80 to \$85 a month.

Car replacement at the end of the year will be on a model basis—a '51 model will replace a '50 model. No used cars will be rented as the maintenance would be prohibitive. Renting a '47 model would be a false economy as maintenance would absorb the dealer's margin.

The advantages of car rental to the dealer are readily apparent: he knows what his unit costs, what insurance comes to, what his investment is and what operating a car the first 12

months will amount to. Phillips has not worked out his figures precisely yet, but he knows that the first year's cost will more than pay out in 15 months.

The dollar-and-cents contrast of owning a car and renting a car in Alexandria will have to be pointed out to the prospective car renter as they were to the truck operator.

Car ownership the first year means at least \$1,000 depreciation and operating cost.

Capital investment (if he pays cash)	\$2,200
Insurance (if he paid cash)	127
Maintenance	75
License plates	20
Personal property tax	55

\$2,475

Car rental the first year comes to \$960.

The dealer can do it at much less and pass on the benefits to the car renter because he doesn't have to pay \$2,200 for a car. He doesn't pay a personal property tax and pays a much lower rate in fleet insurance.

The car rental contract will allow 15,000 miles with a charge of four cents a mile in excess of that. With the United States average at 12,000 yearly, the renter will have a wide margin of operation.

Phillips will not encourage out-of-town salesmen in his plan because of excessive mileage and the car's inaccessibility to his shop.

Right now he can foresee that the first year's cost will more than pay out in 15 months.



It doesn't take a lot of training and it doesn't take a lot of time to clean up jobs with steam. That is why it's so profitable for the shop.

By Hal M. Newsome

Save Time, Make Money with Steam Cleaning

"The handiest gadget around our repair shop," says W. F. Langston, garage owner in Miami, Fla., "is a steam cleaner which cleans up any piece of mechanical work with less than half the time and trouble of old-fashioned hand methods."

"The cleaner is simply a flash boiler, waterfed by an electric pump and heated by plain kerosene injected in a fuel pump. It produces 120 pounds of live steam in about 5 to 10 minutes."

"With a long and insulated nozzle, the mechanic or wash man can direct the continuous steam pressure from the best angle to any part of the oil- and really clean off the grease, sludge, puffin and dirt in no time. As the work is partly taken down, it also cleans the inside of motors, transmissions, rear ends, etc."

"After the steam treatment the mechanic works with clean hands, clean tools and clean parts—and I don't mean slippery clean. I mean dry clean. So it's natural he works with more enthusiasm and sureness, with not the slightest trace of getting back into the mechanism."

"The steam cleaners cost from about \$450 to \$700, but a busy shop that pushes washing and cleaning jobs can pay for one out of profits

in a year or in a couple of years on a normal volume of routine business. Besides, there is the morale building feeling that it's helping all the time to turn out better—and better looking—jobs."

"We only use about a quart of kerosene and a couple of cents worth of steam-off powder for a job, as against the two gallons of kerosene used to hand-clean a motor overhaul."

"It used to cost us about \$8 to clean up a motor overhaul and be-

cause it was a part of a big job and didn't really look clean, we sometimes had to throw it in for nothing. Now we can tack \$3.50 on to an overhaul and get it. The cleaning takes not 15 minutes of easy work without any brush, putty knife or mess. With the pan down we get the inside too."

"Say a prospect comes in for a valve job or some minor trouble and we see he has a messy motor. We say, 'How about steam-cleaning your motor inside and out for \$5?' On a small repair we can charge more for cleaning, and half the time it's a sale."

"In 15 or 20 minutes we've made a nice profit that helps make up for the jobs where either competition has hammered the price down or where something goes wrong on a quoted job that shaves our profit to the bone or even kills it."

"On a transmission or rear-end job we save an hour and a half cleaning time, all net profit. On wheel-aligning or front-end or brake work it's the same story. Also on quoted prices the mechanic can actually do the repair job itself in much less time with clean parts, leaving us a nice profit margin there."

"Especially in a damp, salt air climate like ours, a profitable salaried man can be worked up cleaning and protecting the chassis. Steam is great for cleaning a chassis, though to make

(Continued on page 130)



New Mechanics Sign His Direct Mail

By Stuart Covington

WHEN a new mechanic is hired at McGarity Motors, Inc. (Ford Mercury), Troy, Ala., the first thing President John W. McGarity does is hand him a pen and stack of letters on which to place his signature.

These letters are "ghost written" for the mechanic by McGarity or a member of his staff in a friendly, conversational style and mailed to a selected group of car and truck owners listed by the mechanic as his closest friends and best customers. The letters have gone a long way toward bringing new customers into McGarity Motors' shop.

Recently McGarity employed a man who had developed an enviable reputation as a tune-up specialist at another shop. As soon as the tune-up expert checked in at McGarity Motors, 200 one-page, personal letters were mailed to car owners with whom the tune-up man had enjoyed the friendliest relations at the place where he formerly worked. McGarity signed some of these letters, but a number of them were written as if they had been penned by the tune-up man himself and they bore his signature.

Soon after they were dropped at the post office, several car owners who had developed confidence in the tune-up man's ability rolled into the shop for a check-up. McGarity is counting most of these as permanent customers.

"Employing a good mechanic with a favorable reputation will not assure increased business even when newspaper advertising is run to announce the change," said McGarity. "Newspaper ads or radio spot announcements are frequently overlooked, or possibly the name of the mechanic in question fails to register. But when a car owner receives a personal letter, he is almost certain to read it, and if that letter is signed by a me-

chanic he knows and trusts, the letter is apt to carry a great deal of impact. Many persons look at a letter's signature before reading its text."

Many motorists are "one mechanic" men, McGarity pointed out, and like the old lady who swears by a particular doctor or dentist, they don't want just any repairman delving into the motor of their new car. When their favorite mechanic leaves a shop where they have been trading, they are quite likely to follow him to his new job. All they need is a little push to jog them into making the change. A friendly personal note from the mechanic often provides the necessary impetus.

Even if the new mechanic concentrates on only one type of job, as was the case recently at McGarity's, his followers are almost certain to okay

any further work which the shop force finds is needed on their cars.

Mechanics like McGarity's plan too. It gives them a feeling of pride and the belief that they have a personal stake in the business. The result is a better, more dependable workman who will devote more time and energy to selling extra jobs. All McGarity mechanics receive 50 per cent of gross labor.

The personalized letters are a step in the direction of lower labor turn-over too. With McGarity's pay plan, every mechanic is naturally obliged to keep busy if he hopes to draw a fat pay check. A new man, especially if he is a specialist, may run into a temporary slump in shop volume soon after he arrives. A couple of skimpy pay envelopes may discourage him and he will decide to move on again to greener pastures. But with McGarity's system of aggressively selling new employees to the firm's customers and the mechanic's friends, many a dull week can be turned into a profitable six days by several motorists attracted through the personalized messages.

McGarity's labor turnover is extremely low, but when he is forced to take on a new man in any department, he thoroughly investigates his background and working habits as well as his knowledge and ability and extends every effort possible to check into his home life and recreational habits.

"These factors tell a lot about a man's value as an employee," he explained. "And I try too to get leads on them from my employees." These

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President John W. McGarity and his service manager, Rip World, look over one of the letters which have added to shop volume.



Preee-senting!

THE SENSATIONAL Mr. Schmitz



Here's Clown Frank E. Schmitz with the show-stopping car he made.



And here's Schmitz as a dealer.

WHEN the nationally known Ganesville Community Circus goes into its 21st season this year, the principal producing clown will be that side-splitting, sensational, successful Dodge-Plymouth dealer, Frank E. Schmitz.

Schmitz is not merely one of the star performers. He built the miniature car which is the basis for one of his most popular acts. He is a good example of how a dealer can contribute to community life, operate a successful business and have a lot of fun besides.

The circus, which is said to be the only show of its kind in size produced and presented by amateur artists, was started in 1930 in the small Texas city, which has a population of 15,000. It began as an activity of a Little Theater group and it's still presented by local citizens in their own and neighboring towns.

By George C. Morris

But the three-ring circus can now rival anything produced under the big top. It includes all types of acrobats—tumbler, wac-walkers, trapeze performers, gymnasts, dog and pony acts, horse acts and, of course, clowns.

Schmitz is a leading figure in the clown acts and has produced two sequences which never fail to leave the audience shaking with laughter.

The first of these is built around a

Frank Schmitz has made two big successes in a Texas city—as an automobile dealer and as an amateur circus clown.

small compact toy automobile, measuring 51 inches long, 27 inches high and 17 inches wide. It is powered by a lawn-mower motor. Schmitz folds his five feet six inches height and 165 pounds into the car and out of sight.

When he drives into the arena, it looks like the small car is driverless and just running loose. Another clown of the circus poses as a traffic cop and stops the car after it has made the rounds of the track. No sooner does the car stop than out comes Schmitz in his clown's outfit. After an argument with the traffic cop, Schmitz twists his body into the car in seven seconds, honks the horn and heads for the exit—always amid a roar of applause and laughter.

In another act Schmitz uses a small two-door car of Italian make, approximately two thirds the size of a Model

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This is Nash's two-passenger "\$1,000" car. The experimental model has simplified exterior styling and a choice of three low-horsepower foreign engines to give high gasoline mileage.

Do Americans Want This \$1,000 Car?



DOES the American public want a car costing \$1,000 or less, with the limitations that would be necessary at this price?

A small two-passenger, two-door convertible shown last month by Nash Motors Division would be in that price range if it goes into production next year. It can also be built as a sports roadster or a two-door, all-steel coupe.

Designed to use foreign-made, low-horsepower engines, the car is 12 feet one inch long, four feet five inches high and five feet two inches wide with an 84-inch wheelbase.

Temporarily called the "n. x. i." (Nash experimental international), the car shown is powered by a four-cylinder, 18-horsepower Italian engine. It would deliver 45 to 50 miles a gallon of gasoline and have a top speed of 60 to 65 miles an hour, Nash engineers said. It weighs 1,350 pounds.

Alternate engines include a Fiat of 36 horsepower which would deliver 55 to 60 miles a gallon and attain a top speed of 65 to 70 miles an hour. It weighs 1,450 pounds. Both engines have four-speed transmissions.

A third alternate engine is an English-built "Standard" of 36 horsepower with a three-speed transmission. Other European powerplants could

also be adapted to this car, engineers said.

Exterior design has been simplified in many ways. Front grille and bumper are combined into a single unit. Excess chrome has been eliminated. The drop-center, one-piece windshield, which comes below the fender line, conforms to the curving lines of fender and engine hood.

Engine hood, front fenders and lights are combined in one assembly which may be raised for engine or front-end service. The trunk lid has been eliminated, storage space being accessible from inside the car behind the two passenger seats.

The car has leg room equal to the average in full-sized American cars, company engineers said. If built, it would feature the Nash "Air-fyte" construction, with body and frame as a single all-welded unit.

"The n. x. i. is not an attempt by Nash to invade the large-volume automobile market," George W. Mason, president and chairman of Nash-Kelvinator Corp., said. "The car, if built, would probably have a relative, specialized market potential."

"In our judgment, the n. x. i. should meet basic transportation requirements not now served and thus this car should represent plus passenger-car sales and would not be

competitive with full-sized cars now made by Nash or other manufacturers."

This small experimental car should not be confused with a new full-size "X" model to be introduced this spring.

"The n. x. i. is not in production, no tools have been ordered and the cars could not be manufactured for at least one year," Mason said. "It would be manufactured only if public opinion clearly shows need, desire and willingness to buy them in sufficient quantity."

Six showings have been held in different sections of the country and those attending were asked to express their opinions of the car. Nash announced plans to poll 250,000 people in a survey of the market for the model.

Would the n. x. i. be a satisfactory second car for two-car families? Would it have enough appeal for commuters who park all day? Would women prefer a small car for easy handling, parking and economy? Are there enough potential buyers who would be satisfied with a car having a top speed of 65 to 70 miles an hour and less "stop light" acceleration?

Those are some of the questions Nash hopes to answer before deciding to build the car.



Cadillac Has New Carburetor

A CARBURETOR heating system, improved oil line pressure in the Hydra-Matic transmission and improvements in the steering mechanism are some of the mechanical changes in the 1950 Cadillacs.

The carburetor has leaner calibration resulting from cylinder-head modification. In the new design, exhaust heat is directed around the carburetor idling system. Introduction of this heat immediately after starting a cold engine not only reduces the warm-up time but also minimizes the possibility of air-borne moisture condensing and freezing in the carburetor idle jets during cold, humid weather, company engineers said. After the engine is warmed up, the heat

to the carburetor is reduced automatically by an exhaust manifold heat valve.

A smooth shift with the Hydra-Matic is provided through a system that regulates oil-line pressure. Pressure is automatically varied by the position of the accelerator pedal. The response to light throttle at an easy start is low oil pressure for a smooth shift at low speed. Depressing the accelerator results in increasing oil pressure to control the greater engine power during shifts at higher speeds.

The Hydra-Matic is standard equipment on all Series 60 and 62 models and optional on Series 61 and 75 models for 1950.

Steering wheel "kick" is absorbed

and minimized by a new arrangement of drag-link springs, a more flexible steering-column shaft and by using a larger steel core in the steering wheel to increase the inertia. Front-wheel suspension improvements and redistribution of the car weight increase directional stability and give a firmer feel in handling, particularly at higher speeds and on curves.

Front-wheel suspension now incorporates direct-acting shock absorbers which are mounted inside larger coil springs. New direct-acting shock absorbers are used in the rear suspension, where mounting at an angle provides better control of both road shock and side motion.

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The Series 61 sedan (above) and the "62" convertible show the new body lines and fender treatment.





NEWS BRIEFS *of the*

Atlanta's Television Show Puts Spotlight on '50 Model

A NUMBER of residents of Atlanta, Ga., got their first glimpse of the 1950 Plymouth on a television show sponsored by Wagstaff Motor Co., Inc., and judging by the prospects brought into the showroom, this way of introducing a new car must have made a good impression.

President B. E. Wagstaff, his personnel and the staff of the television station teamed up to present a half-hour introduction of the car—its looks, mechanical features and customer reaction.

"While at first the cost of this half-hour broadcast seemed high, we have been quite pleased with the results," Wagstaff said. "In addition to the crowd that jammed our showroom while the broadcast was in progress, we reached other people who would not otherwise have come into our showroom."

"After the program was over, the phone started ringing and in a short time our showroom was packed with

another crowd just as big as the one that was shown in the program. Apparently a lot of those people saw the car on television and then decided to come in down and see the real thing. We had to stay open an hour later than we had planned on the night of the show and for three nights we finally had to lock the door so we could go home."

Wagstaff used a five-minute commercial to introduce the DeSoto a short time before the Plymouth was brought out. That was the first time a car had been taken into the studio of the local station. For the Plymouth, he decided to use his own showroom as a background and take a half hour to explain it fully. This was the first time this technique of announcing a new model had been used in Atlanta, he said.

"We were a little worried about the way a half-hour commercial would go over, since most television commercials are only a minute long," Wag-

staff said. "We believe a large part of its success was because it was completely unrehearsed. The audience could tell that and they seemed to like it."

"The television staff trained the cameras on various parts of the car while the announcer talked with our staff and visitors about that particular feature. Our service manager, for example, discussed the mechanical features while the cameras picked up an actual engine. We were pleased at the way the various parts of the car showed up. It gave us a chance to do a kind of selling which we can usually do only when people are actually in the showroom."

A television set was installed in one side of the showroom so the visitors could see how the show looked on a television screen while it was being produced. This was a popular feature.

Some of the results of the program may have been because it was a novel experience for the people of Atlanta, Wagstaff said. Although he doesn't plan to repeat the program in the same form for other models, he says he plans to continue to use television in some form for advertising.

These photos were made during the half-hour television show used by Wagstaff Motor Co., Inc., Atlanta, to introduce the 1950 Plymouth. President B. E. Wagstaff (center) is shown discussing some features of the car with the announcer of the program. Other

Wagstaff employees and visitors to the showroom also took part. Some of the throng which jammed the showroom is shown below. A television set was installed so visitors could watch the broadcast as the show was produced. The show brought a big crowd.



AUTOMOTIVE INDUSTRY



City Chevrolet Co., at Charlotte, N. C., really "dressed up" its lot, as these before and after pictures illustrate. "This modernization program is in line with the national program of Chevrolet Motor Division," said President P. L. Abernethy, "and our

new lot, which occupies the same location as the old one, is complete in every respect — concrete surface, closing office in rear and is lighted by 25,000 watts. We feel it is the most outstanding used-car lot in the southeastern section of the country."

Salesmen Bettered Way Of Life, Greiner Says

"SALESMANSHIP was the pathfinder in pointing the way toward greater development of the private enterprise of life," Karl M. Greiner, vice president and general sales manager of Packard Motor Car Co., told the Corpus Christi, Texas, Sales Executive Club last month.

Scientists, technicians and engineers developed America's great resources, he said, but added: "All their work and advancements were unknown or, at best, novel to the man in the street for it took merchandising and salesmanship to put new products into the hands of people who could use them."

He also urged repeal or reduction of the federal automotive excise tax. "During its time, the tax served a useful purpose, but it seems to me that the emergencies for which the tax was used are over."

Bonney Announces \$5,000 Contest for Mechanics

A \$5,000 jack-pot contest for mechanics and their helpers highlights the 1950 merchandising program of Bonney Forge & Tool Works. The contest is open to the entire trade and begins March 4 and ends

May 31, a company announcement stated. Entry blanks are obtainable from Bonney jobbers.

There will be 1,507 prizes for mechanics, with a top prize of \$1,000. Jobber salesmen will also participate in the contest, with a separate set of prizes for their part in the contest.

Eugene Stowers, Chevrolet-Buick-GMC Truck dealer of Bluefield, W. Va., was one of the some ten southerners on the programs for dealer clinics at the National Automobile Dealers Association convention in Atlantic City early this month. Stowers was a member of the panel which dealt with employer-employee relations.



Ford Revises Southwestern Region Sales Set-Up

FIVE top-level changes in the sales staff of the southwestern region of Ford Division have been announced.

George P. Montagnut is now assistant sales manager of the region, with headquarters at Kansas City. He was formerly district sales manager at New Orleans.

David R. Crandall, Jr., assistant regional sales manager, was appointed district sales manager at Dallas.

Earle S. Alexander, formerly at Houston, has been named Kansas City district sales manager. He has been succeeded at Houston by Eric Williamson.

Clairborne H. Weigand has been promoted from assistant district sales manager at New Orleans to sales manager there.

Missourians Meet May 23

The 1950 convention of the Missouri Automobile Dealers Association will be held May 23 at the Hotel President in Kansas City. Manager James A. Gordon has announced. Plans for the convention are well under way, with Don E. Fitzgerald as committee chairman, he reported.

Looking Ahead

- March 23-26—Eight Southwestern Automotive Show, The Coliseum, San Antonio, Texas.
- April 25-27—Third Highway Transportation Congress, sponsored by National Highway Users Conference, Mayflower Hotel, Washington, D. C.
- May 14-17—Annual convention of North Carolina Automobile Dealers Association, Carolina Hotel, Pinehurst, N. C.
- May 18-20—Annual convention of Automotive Engine Rebuilders Association, New Jefferson Hotel, St. Louis, Mo.
- May 23—Annual convention of Missouri Automobile Dealers Association, Hotel President, Kansas City, Mo.
- Sept. 9-11—Annual convention of South Carolina Automobile Dealers Association, Ocean Forest Hotel, Myrtle Beach, S. C.
- Oct. 15-17—Annual convention of Tennessee Automotive Association, Memphis.
- Oct. 19-20—Annual convention of Florida Automobile Dealers Association, Biltmore Hotel, West Palm Beach, Fla.
- Dec. 1-2—Business conferences of National Standard Parts Association, Chicago, Ill.
- Dec. 4-8—Automotive Service Industries Show, Navy Pier, Chicago, Ill.
- April 19-22, 1951—Southeast Automotive Show, Birmingham, Ala.

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Ed Maher Receives Religious Honors

HIGH religious honors have been given Ed Maher, president of Ed Maher, Inc., Ford dealership at Dallas, Texas. He has been appointed a Knights Commander of the Order of St. Gregory the Great by Pope Pius XII.

Maher was honored for his many years of lay leadership in church affairs. Before moving to Dallas, he lived in Ranger, Texas, where he had helped to build a church, school, convent and rectory. Maher and his wife have endowed a foundation in the Dallas diocese for annually paying expenses for some student aspirant for the priesthood. He was one of the leaders in building the new Church of Christ the King, dedicated at Dallas in 1947.

He will be invested with the honors of the order at Sacred Heart Cathedral at a later date.

Maher is this year celebrating his

37th anniversary with Ford Motor Co. He joined Ford in 1913 as manager of the Dallas parts department, became a partner in the Ford dealership at Ranger in 1919 and returned to Dallas in 1930 to establish his present firm.

In March, 1940, he was honored by Ford for establishing a world record of disposing of 309 new units in one month, breaking previous records. On another occasion he set another record by delivering 53 Fords in a single day.

Henry Ford is said to have credited Maher with originating the idea of the Ford Merchandising School in Detroit. Tom Maher, his son, was the first graduate of the school for sons of Ford dealers to receive his own franchise for a dealership.

Maher is a former president of the Dallas Automotive Trades Association. His brother Louis is associated with him in Ed Maher, Inc.

Dawson Becomes Manager Of Delco-Remy Division

H. D. "Hi" Dawson has been appointed general manager of Delco-Remy Division of General Motors Corp., succeeding O. V. Badgley, who has retired after 41 years

Mr. Dawson



with the division.

Dawson joined the division in 1925. He became chief engineer in 1932 and factory manager in 1940. He has been in charge of many of the developments in the automotive electrical field in the last decade, the GM announcement said. He has worked with a number of technical committees and societies.

One of the largest of GM's accessory units, the division has approximately 13,500 employees.

Hearn Heads New Marshall Dealer Association

OLIN C. Hearn of Olin C. Hearn (Ford), Albertville, has been elected president of the new Marshall County (Ala.) Automobile Dealers Association. Ralph Smith of Guntersville is vice-president and Bob Lee of Albertville is secretary-treasurer.

Monthly meetings will be rotated among Boaz, Albertville and Guntersville.

You Can Reduce Cleaning Cost

You can reduce costs of keeping your shop clean.

Partner W. E. Aldred says Hair Motor Co. (Ford) at Summerville, Ga., has realized a nice saving by using a roll of brown wrapping paper at each of the five mechanics' benches. Paper is rolled out at the desired length and cut off as in shipping rooms. It is placed on benches when dirty, greasy jobs are coming up. And it is spread under a car when dirt or grease is expected from some underbody job.

Aside from leaving more time for the part-time clean-up man to devote to his other job of lubricating cars, this innovation has permitted the shop to be kept in a constantly clean condition, since mechanics wad up paper after completing a job and throw it in a wastebasket.

Missourians Name Manager

James A. Gorman has been named manager of the Missouri Automobile Dealers Association. He will be assisted by George D. Hippen, secretary, whose time will be spent mainly on the group insurance plan.

Buick Names Missourian For Merchandising

JOHN H. SCUDDER, a native of St. Louis, Mo., and formerly a district manager in the St. Louis zone, has been appointed director of merchandising for the Buick Motor Division. Scudder attended Washington and Lee and the University of Missouri. He joined Buick in 1946 as claims manager at St. Louis.

Scudder succeeds Robert E. Rudd, who has been named assistant general sales manager. Rudd joined Buick in 1940 and was for a time assistant zone manager at Kansas City and at a later date zone manager at St. Louis.

Flournoy Heads Dealers

SEABORN J. FLOURNOY of Buick Flournoy Motor Co., Norfolk, Va., was elected president of the Norfolk-Portsmouth Automobile Dealers Association recently. W. C. Everett of Virginia Beach is vice-president and G. W. Knighton of Portsmouth is secretary-treasurer.

Tennesseans Change Site

The 1950 convention of the Tennessee Automotive Association will be held in Memphis instead of Chattanooga, David P. "Doc" Whitchel, executive vice-president, reported. The change was necessary because there were not adequate hotel facilities in Chattanooga Oct. 15-17, he said.



This "Pillar of Progress," showing advances in automotive design and engineering during the last 50 years, was one of the highlights of the Mid-Century Motorama, presented by General Motors Corp. at the Waldorf-Astoria January 19-27 to display its full line of 1950 models.

GM Show Gives a Glimpse At Car's Past and Future

PROGRESS of automobiles in the last half-century and a look toward the immediate future as represented by 38 models of its 1950 lines was presented by General Motors Corp. in its Mid-Century Motorama, held January 19-27 at the Waldorf-Astoria Hotel in New York.

This second post-war showing of GM cars included two action features with live models and actors, as well as the new car models and many displays of technical processes and units.

One of these, "Motors and Melodies," was presented on a revolving stage and described in a company announcement as a "happy review of America on wheels throughout the first half of the century." The scenes touched on important periods in America from 1900 to 1950, with emphasis on the role the automobile has played in the development of the country. Actors and actresses in period costumes portrayed in pantomime the periods covered, with a background of appropriate music and narrative.

"Mid-Century Modes" was staged against the background of the 30-foot "Pillar of Progress," which showed advances in car design and engineering from the start of the century to the present. It was a style showing of current women's fashions, with live models posing with five GM cars. They were displayed by a moving mechanism of turntables.

The displays of various mechanical features attracted a lot of attention also. One of these was an entire chassis revolving on pivots so spectators could see it from all angles. An

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"Just until we get the parts to repair your top mechanism."





Southern JOBBERS AND FACTORY MEN

Salesmen of Jefferson City Auto Supply Co. now present about 90 per cent of all statements, both current and past due. About 75 per cent of the accounts pay on the spot with this billing system.

Their Collection System Means



Smaller Accounts Receivable

The problem of collecting past due accounts can be most exasperating in any business, and the automotive jobbing business is no exception.

Steam-roller systems, suits and attachments and cold form letters often do more harm than good, according to Ray H. Kruse, manager, Jefferson City Auto Supply Co., Jefferson City, Mo., who has worked out a method that not only keeps the good-will of the customer but has reduced past due accounts receivable to a vanishing point.

While the method in use by Jefferson City Auto Supply has been developing over a period of years, the latest refinement has been to deliver the monthly statement in person. This was a normal growth from the idea of sending past due statements out with salesmen to be collected at the time the regular call was made.

Now more than 90 per cent of all

By L. H. Houck

the statements, whether current or past due, are delivered in person by the salesman who sold the merchandise. The result is that at least 75 per cent of the persons presented with the statement pay it at the time and save the expense of mailing it.

For example, Kruse explained, a salesman took out eight statements and brought back seven checks.

Another advantage of this method is that the salesman usually gets there first with his statement and consequently gets first treatment from the money pot. It is the nature of the business, and no reflection on it, that thousands of customers of the jobbers of the country are small business men who use all their capital and try to turn it over as fast as possible.

When a tight month shows up and the money to pay the suppliers is short, the first man to show up with

a statement usually gets his money and, strangely enough, he will also sell the most merchandise to that account the next month because he has been paid and the account will feel that the company owes him the merchandise.

Kruse carried a catalog when he was hardly 18 years old and he said he often remembers an old salesman for a competing company that he followed. This salesman collected from his own accounts and turned up impressive sales—a volume which could not be approached by others.

It was this salesman's habit, Kruse said, after visiting an account, to announce, "Now is time to break bread for the Blank Auto Co.," and present the statement. If he didn't get all of the amount due, he would always make the same comment, "A mighty thin slice, but bread we must have."

It was his habit to always require the customer to produce some

"bread." Customers expected it, he was usually paid first and because he had been paid he got the next orders from these customers. Kruse said this was a valuable lesson in the relation of credit to merchandising.

Kruse emphasized that most people are honest and that his company only wants to do business with people who are honest. On this basis, he pointed out, you are sure that the customer intends to pay and is prevented from doing so by lack of money, which can stem from many causes—too much retail credit, bad management, lack of capital, lack of business.

At this point if the account is a month or so in arrears, Kruse makes a personal call, either with the salesman who handles the territory or alone. Incidentally, Kruse visits all customers to get acquainted with them personally and so when he does show up, they know who he is. When he calls, he talks over the problems which are preventing the customer from paying the bill.

In some cases, Kruse related, business has fallen off and the dealer has too much on his books and so needs a new start. By round table discussion it might be decided that the customer will go on a cash basis for a while and that he will pay the profit he makes on parts on the old bill. In nearly all cases the customer has offered to split the combined amount of profits on parts and labor and apply to the old bill.

Once the old account has been cleaned up and the business is ready for it, the open account is again extended. Kruse is opposed to C.O.D. accounts, believing that they serve to discourage the customer from buying from the company using them.

There are other situations, Kruse pointed out, where almost the opposite decision is made as a result of a personal conference. It often happens that the dealer can make more money if he has more credit extended. When this is the case the credit is extended, the merchandise is shipped and the increased earnings serve to pay off the back debt and even the business up with the current bill. In both extremes as illustrated, it will be noted that the matter is handled in such a manner that the customer

Collection methods? No set of rules will work for everyone, this Missourian found. Yet he believes there is a pleasant way to get the money under any conditions, like the man who operated a combination grocery, service station, garage.

will feel like continuing to buy from the company because the company has tried to help him.

In another instance, Kruse said, they were asked for credit by a concern which seemed to be headed for a C.O.D. basis with other suppliers, and obviously a bad risk as judged by past performance.

In this instance Kruse decided to visit the prospective customer and see what the situation might be. He discovered to his astonishment that the man had \$100,000 worth of merchandise when \$30,000 would have been ample to do the volume he was doing. For instance, he had 30 to 40 sets of brake lining for one model car when his sales could only justify stocking three or four sets. He had been over-sold on everything and had all his money tied up so he didn't have operating capital. Kruse discussed the problem with him and suggested reducing the stock to proper propor-

tions and in the meantime they would supply him with essentials. The up shot was that the top-heavy business was turned into a successful concern and as a reward for his helpfulness Kruse enjoys the bulk of the business from this firm.

Another example concerned a small firm that actually did discontinue operations owing the company. Instead of filing a suit and getting a judgment of questionable value, Kruse held an other conference and the man agreed to pay something on the bill monthly. With a few telephone reminders, this agreement was carried out. The man is again in good shape and is planning on opening up a new automotive business at a better location. Instead of feeling miffed about the collection method, he feels grateful.

Of course, Kruse pointed out, no set of rules will work for everyone. Yet he believes that there is some pleasant way to get the money under any conditions, like the man who operated a combination grocery, service station and garage.

He had been warned by credit agencies that the account was getting slaky and took due precautions and got the account on a cash basis. The operator paid cash on delivery for four or five months. But the payment of cash over a period of time does not necessarily mean a good credit risk. Then one day the operator was out and the salesman was asked to leave the merchandise. Almost before Kruse knew it, the account owed them a considerable amount.

Kruse went to see what could be
(Continued on page 115)



If an account is a month or so in arrears, Ray H. Kruse (shown at extreme right) has a personal discussion with the customer to see how the bill can be paid without any hardship to either of them. The customer shown here was not one of those in arrears, however.



Here's a second look at Richmond Auto Parts, Inc., Richmond, Va. Last month a picture of the exterior was carried and here is the way the counter and machine shop looked at the time of the formal opening. No comment on the effectiveness of the layout is needed; the pictures speak for themselves as to the displays, arrangement of counter facilities and equipment in the machine shop. H. B. Truslow is president of this Virginia firm.

Southern Bearings & Parts Promotes O. H. Hamby

O. H. HAMBY, for the past 14 years sales manager of the Automotive Division of Southern Bearings and Parts Co., Inc., Charlotte, N. C., has been promoted to manager of the Automotive Division. He will have full charge of the division under the direction of the officers of the company, President C. F. Beeson said.

Hamby joined the firm in 1924 and has held several positions in the sales department. He is well known in the industry. He is a past president



Mr. Hamby

of the Virginia-Carolina Automotive Wholesalers Association and has given considerable time to various associations in the automotive field.

Southern Bearings and Parts is a pioneer in the replacement parts field. The company was organized in 1921 in Charlotte and now operates stores in Winston-Salem, High Point, Statesville, Fayetteville, Lumberton and Rockingham, N. C., and Lancaster, S. C.

Comer Rejoins Tuttle

T. T. Comer of Greensboro, N. C., has joined the sales force of the T. D. Tuttle Co., Dallas, Texas, and will represent the Tuttle lines in North Carolina and Virginia. "Mr. Comer has worked for us before and he is well informed in the sales and service of the lines we have," Owner T. D. Tuttle said.

"We recently added Bear service equipment to our lines," President J. S. Simmons, Jr., of Simmons Parts Co., Inc., Staunton, Va., reported.

Have you tried the free coffee at John Rogers Co. in Atlanta? That java stands right up on its hind feet and gives you a real black look before you begin gulping.

Tex Ritter has joined the force of the Jonesboro, Ark., store of Mills-Morris Co.

"General conditions in our territory are on a steady incline," Glenn H. Day, manager of Cornelius Motor Supply, Inc., Pampa, Texas, reported.

Holland Auto Supply, Inc. Adds Another Building

HOLLAND Auto Supply, Inc., Greenville, S. C., recently acquired a building adjoining its original building and connected the two structures by taking down a wall. This gives the firm an additional 2,200 square feet of space. The machine shop will be housed in the basement of the new building.

"We have rented a parking lot in the rear of our building so that we have sufficient parking space for all our accounts," Ned E. Holland said.

Am-Ben Appoints Alge

Alge Distributing Co., Inc., 367 Simpson St., N. W., Atlanta, has been appointed distributor in the Southeast and Southwest for Am-Ben Corp. of Chicago, manufacturer of Wad-Vue rear view mirrors.

Host Rice, city salesman for Cornelius Motor Supply, Inc., Pampa, Texas, doubled volume during his first three months on the job, Manager Glen H. Day reported.

Amco Makes McNaughton Southeastern Manager

ELLI McNaughton is now southeastern district manager for Asbestos Manufacturing Co. He will supervise sales in North and South Carolina, Georgia, Florida, Alabama and eastern Tennessee from headquarters in Atlanta.

McNaughton's offices will be at the new Amco warehouse at 734 West Peachtree St. The warehouse will have a complete stock of brake lining, clutch facings, fan belts and hose.

Jack Williams Dies At Fort Smith

JACK Williams, executive vice president of Williams Hardware Co., Fort Smith, Ark., died recently after an illness of ten months. He was 38.

Williams had been with the company for 19 years, having started in the stock room when he was 19. During the war he was a pilot in the Naval Air Force.

Survivors include his widow and twin sons, Jack, Jr., and Joe.

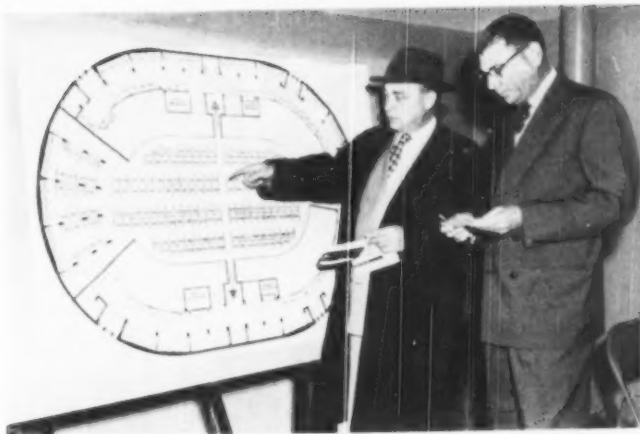
Scaled Power Promotes Gray

Ed Gray has been appointed assistant sales manager of the Scaled Power Corp. He joined the firm in 1933 as a salesman and has also been a special sales representative and district manager, the announcement said.

Charlie Moorehead, who's done a well-known fine job handling the credit department of Motor Parts & Supply Co., Inc., at Mobile, Ala., is also editor of the firm's "Behind the Lines." In his January issue Charlie covered an important subject.

By now everybody is telling you how much they appreciate your business, and we do too, only it will be expressed in a little different way. It always helps to know what the score is, so it's a good idea to start by outlining our policies, which means our way of doing business:

1. Our terms are thirty days only. We ain't millionaires, and if we let some go for sixty or ninety days we couldn't refuse all the rest. (See Uncle Sam's Fair Trade Laws)
2. We allow 2% discount if bills are paid by or before the tenth. Can't do it on the 15th or 20th, or we would have to let everybody. (See Uncle Sam's Robinson-Patman Act)
3. On refunds or credit memos, we have to have the invoices or the number. Heck! Even dressies will insist on that.
4. Merchandise kept 60 days is a little bit old to be returning for credit or refund. Wait 5 more days 'cause at 65 it can draw a pension.
5. We want to deliver everything the minute you order it, but with only five trucks and lots of customers it is a problem. Of course we could buy 14 more trucks, but then we couldn't buy parts to haul in them. We could lose half of our customers, but then we couldn't make enough to keep up five trucks. Well, say something. Don't just stand there.
6. SERVICE. Boy, that's a good word. It's like a fast woman. Everybody talks about it. When they talk about our service tho, they are letting somebody else alone. It sure ought to be good. Both us and our customers raise unhurted hell if it ain't.
7. Products. Thank goodness we don't manufacture any of them. We can help you cuss them if you want to. The only trouble is we can't find anything better on the market. We are just like a hotel, if you don't see what you want, holier and we will get it for you. (Please tip the bellboy)



First to draw last month for space in the Southwest Automotive Show was G. B. Tapner, left, representing Industrial Tape Corp. On the right is Elmer Miller of the Straus-Frank Co., who is chairman of the show committee this year. The show will be held March 23-26.

186 Exhibitors Assigned Space at Southwest Show

By Baron Creager
Southwestern Editor

EXHIBITORS numbering 186 will display their wares at the Eighth Annual Southwest Automotive Show, March 23 to 26, inclusive, in the new Coliseum at San Antonio, Texas, it

was announced by the show office after a space drawing last month in the Mission City.

Space was assigned through the usual procedure of drawing in accordance with seniority of exhibitors and if it had been available, more space could have been assigned, according to Dean Johnson, show manager. Because of the great demand for space, every possible area in the Coliseum will be utilized.

The usual kick-off banquet on the night of March 22 in the Plaza Hotel will precede the opening of the show the following morning. The banquet will be open to sponsoring jobbers and all exhibitor personnel.

Johnson said that with completion of the space drawing a publicity campaign to reach all branches of the automotive service industry got into full swing. "Get It from Your Jobber," theme of this year's show, is being used in promotional material and will be incorporated in show decorations.

Jobber customers may visit the show from 1 to 6 p. m. on the first two days, from 1 to 9 p. m. on the third day and all day Sunday, fourth and final day of the exposition. Tickets have been supplied to sponsoring jobbers who will distribute them among their customers. Job-

(Continued on page 148)

SERVICE



AND MAINTENANCE

When Voltage Drops in Starter Circuit



By E. M. Lowery
Technical Editor

There is still one or more in every shop!

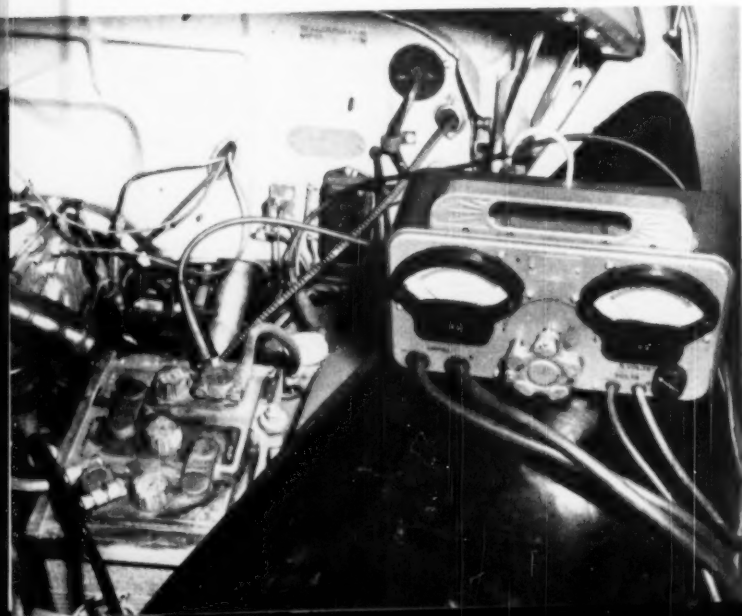
You know, the fellows who make all the fuss about the "Boss" not buying any up-to-date analyzing equipment.

To make a long story short, the equipment was purchased and installed. The company sent over an instructor to coach the men in its use. The expensive equipment was placed

in a conspicuous spot (for sales appeal).

There it sat—gathering dust. And the fellows continued to do the job the old way. When they were asked why the equipment was not used, their reply was "it took too long." Yet, they spend hours guessing out a tough one, when correct use of the equipment will spot the trouble within a very few minutes.

Here's a case of testing for voltage drop across the starter switch. All tests must be made while the starter is cranking the engine.



It doesn't pay to guess when trouble develops in the starter circuit. We recall a case where a mechanic pulled a starter three times, changed the battery twice and finally corrected the difficulty by replacing a solenoid switch whose contacts were badly burned, causing very high resistance and too much voltage drop. A voltmeter test across the switch would have saved all this wasted effort by the mechanic.

The starter circuit is the basic electrical system upon which all other electrical units of the vehicle depend for electrical energy. If these units are to operate properly, the starting circuit must be kept in good condition.

One of the greatest troubles found in the circuit is excessive voltage drop, due to high resistance at various points. This resistance may cause the battery voltage to drop so low while the engine is being cranked there will not be sufficient voltage to allow the ignition coil to produce a "hot" spark and the engine will not start. (Some of the boys are still condemning coils because of this.)

If trouble is indicated within the starter circuit, the following procedure is recommended:

March Issue: Brake-Squeak Antidotes

"Something's making my brakes squeak?" What to do about it when the complaint is received will be treated in the article by Technical Editor Lowery in March.

First, determine that the battery is in good condition and fully charged. Make a visual inspection of all cables for their condition. Connect an ammeter of 1000-ampere capacity in the circuit.

Connect a low reading voltmeter to the battery terminal and to the starting motor terminal. Crank the engine in the normal manner and note the voltmeter reading.

The voltage drop should not exceed 0.25 volt per 100 amperes flowing in the circuit.

If the voltage loss is more than 0.25, check the loss from the battery to the starter switch, starter switch to motor and across the starter switch.

If the voltage drop in either cable is more than 0.10 per 100 amperes, inspect and find the cause. If cable and connections are in good condition and no defects are found, it indicates that the cable is too small and should be replaced with one of correct size.

If the voltage drop across the switch is more than specified, the switch should be replaced.

The above procedure should be repeated on the ground circuit by connecting the voltmeter to the battery ground terminal and to the starter motor frame. If this voltage drop is more than 0.15 volt per 100 amperes, check the voltage from the battery ground terminal to the engine block, and from the engine block to the starter motor frame.

The first reading will be an indication of the battery ground cable and connections. The second reading will indicate whether the starter motor is properly grounded through its mounting bolts. (When a starter motor has been removed for any cause, always clean the surface of the pinion housing and flywheel housing.)

If the above tests are within specifications and it is found necessary to remove the starter motor for reconditioning, the bench test may disclose:

Low free speed and high current draw with low developed torque, which may be caused by:

A—Tight, dirty or worn bearings. Bent armature shaft or loose fields.

B—Grounded armature or field windings. Disassemble test armature

on growler and field windings with test lamp.

C—Shorted armature.

Failure to operate with high current draw, which indicates:

A—Frozen or badly worn shaft bearings.

B—Direct ground in fields, switch or terminal.

Low free speed with low current draw, which indicates:

A—High internal resistance due to poor connections, defective leads or dirty commutator.

B—Open field windings.

Failure to operate with no current draw which indicates:

A—Open armature coils. Usually indicated by badly burned commutator bars.

B—Open field circuit.

C—Weak or broken brush springs, worn brushes, high commutator mica. Any of these conditions will cause burned commutator bars.

High free speed with low torque, which indicates:

A—Shorted field windings. Since the field resistance is very low, there is no easy way to test them. If short

is suspected, replace them.

Testing Starter Motor Component Parts

1.—Field coil test for ground. Place test lamp leads to motor frame and field coil lead. If lamp lights, coils are grounded.

2.—Field coil test for continuous circuit. Place test lamp leads on field coil leads; if lamp does not light, fields are open circuited.

3.—Individual field coil test for ground. Break soldered connection and test each coil separately.

4.—Armature test for ground. Place one test lamp lead on armature and the other on commutator; if lamp lights, armature is grounded.

5.—Armature test for short circuit. Place armature on growler, place hacksaw blade on armature, rotate armature; if saw blade vibrates, armature is shorted.

6.—Test insulated brush holder for ground. Place one test prod on end plate and one on insulated brush holder; if lamp lights, brush holder is grounded.

7.—Commutator. Inspect for roughness and burned bars. Resolder any loose leads to riser bars. Turn commutator in lathe and clean up with No. 00 sandpaper.

At 90 miles per hour the ignition system of an 8-cylinder automobile delivers 500 sparks per second, and each spark is timed within 1/10,000th of a second, according to the Delco-Remy Division of General Motors.

"I've got your transmission job whipped and vice versa."



Servicing the Ford Regulator

By Lynn F. Snoddy

CONSIDERING that so much has appeared in print in regard to the checking and adjustment of other generator control units, it seems strange so little has been published that would apply to those used on the cars and trucks of Ford manufacture. These regulators can be serviced quite as well as some of the other leading makes.

To be sure, there are times when burned points, high mileage or the general "beat up" appearance of any regulator indicates the sale of a new unit; also occasions when time saved means more to a customer than the cost of a new regulator. However that may be, it is nevertheless a fact that often a little know-how where these regulators are concerned may mean the difference between a satisfied customer and one who thinks he is just being sold something.

Essentially there is no difference in principle between the Ford regulator and those with which we are familiar. As most of us know, the output of generators is controlled by increasing or decreasing the strength of their field, so it matters not whether this is done by leading the current out of the field to ground or by sending current into a field the other end of which is already grounded. In either case the field strength can be varied by means of the regulator. It is the latter method which is used on the Ford system, current from the armature being admitted to the field and the amount controlled by the spring tension of vibrating points precisely in the same manner as on most other units. So we will proceed with what is encountered with the units in actual practice.

Before we can service any regulator, we must first make sure the trouble is actually in that particular unit of the system, so let's assume one of the cars equipped with a regulator of the type under discussion drives into the shop.

The complaint in this case is "generator not charging," so we proceed to make a preliminary check. Using a reliable voltmeter of ten volts or more scale and one capable of reading

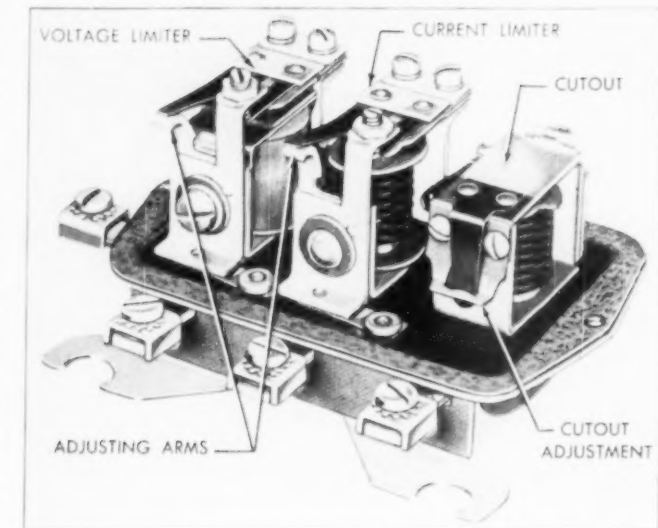


Fig. 1.—Generator regulator assembly with cover removed.

one tenth of one volt, we connect the negative lead of the meter to the armature terminal of the regulator and the positive lead to a convenient ground. With the engine dead or idling, the meter connected in this manner should read battery voltage, or approximately six volts. If when the speed of the engine is increased the voltage reading also increases, the generator is charging.

But suppose that when the engine speed is increased the voltage remains the same. We connect jumper wire from the armature terminal of the regulator to its field terminal, thus cutting the regulator out of the circuit. If the meter now indicates the generator is charging, the trouble is definitely in the regulator.

Of course, there can be a broken field wire from generator to regulator, but that's easy to check for. We simply connect our jumper from the armature or large terminal of the generator to its field or small terminal. If the meter in this case indicates the generator is charging, we know to look for a broken wire.

One more check should be made here before condemning either the generator or regulator. There may be a ground in the wire from generator armature to regulator, in which case

the generator current will all go to ground before reaching the regulator.

A good check for this is to disconnect the wire from the armature terminal of the generator, attaching the voltmeter lead in its place and leaving the jumper connected from this terminal to the field. Slowly increase the speed of the engine. If the voltage increases rapidly, tending to go off scale or otherwise "run wild," the generator is okay.

Care should be exercised in this test not to speed the engine too high or too long as the excessive voltage generated on open circuit can damage the windings of the generator.

Having determined the regulator to be definitely at fault, we proceed to remove it from the car, punch out the rivets and remove the cover. There are on the market tools for removing and replacing the cover rivets with the regulator in place, but lacking that, it is always an easy job to remove the unit and a still easier one to replace the rivets with sheet metal screws.

Visual inspection is all-important in servicing any regulator, so we give this one a good looking-over for such things as burned points, broken wires, loose resistors, etc. One automotive electrician for whom we have great re-

Illustrations courtesy of "Lincoln-Mercury Service News."

spect states he can repair any regulator but it is not always wise or profitable. Deciding this one is worth repairing, we either clean the points or replace them, if new ones are available, and repair such other damage as we are able, remembering we are servicing regulators, not rebuilding them.

In reassembling it is, of course, wise to make sure of proper point alignment. Air gap is important and the following specifications apply to all Ford regulators built during the last two years:

Voltage control air gap, points closed, .032-.035 inch armature to core.

Current limiter air gap, points closed, .032-.035 inch armature to core.

Cut-out air gap, points closed, .014.

Air gap adjustment of the voltage and current regulators is made by means of the screw and brass nut at the top of each one. The gap of the cut-out relay points is adjusted by bending the brass lip at the top or by loosening the screws holding the lower point which will allow it to be moved up or down.

These regulators can be checked and adjusted either on or off the car, provided there is proper equipment, but since the majority of shops are only equipped for on-the-car service, we will handle this one in that way. In these days just about every shop of whatever size has some sort of equipment for checking regulators. Most of it is good when properly used. Special equipment for Ford regulators is not necessary. As a general rule, whatever test equipment has been used successfully for other regulators can also be used in checking those on the Ford product vehicles.

Space does not permit us to go into detail concerning more than one type of equipment, so the test equipment used in this case will be that illustrated in Fig. 2. The circuit has been broken at the regulator by disconnect-

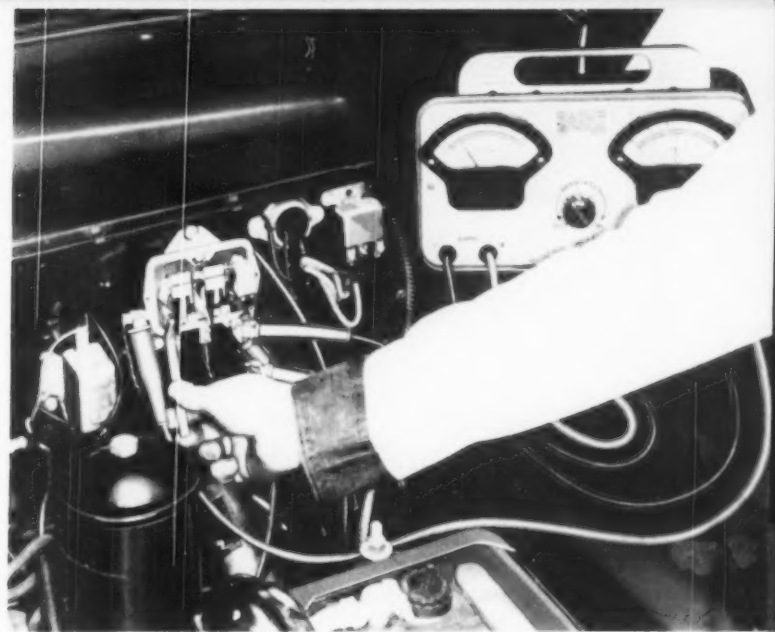


Fig. 2.—Adjusting voltage arm tension with bending lever tool.

ing the battery wire and connecting the negative ammeter lead in its place, the positive ammeter lead being attached to the disconnected battery wire. The negative voltmeter lead is shown connected to the battery terminal of the regulator, the positive lead to the regulator ground terminal.

We start the engine and adjust its speed to approximately 1,500 R.P.M., or a car speed of 30 miles an hour. If the work on the regulator has been properly done and there are no hidden defects, such as broken wires inside the windings, the generator should now be charging with the voltage approximately correct and the ammeter reading somewhere between 20 and 30 amperes. From the former checks we know the generator to be okay, so just what the ammeter reads

at this point is important.

We allow the engine to run at this speed for two or three minutes (providing the voltage does not run excessively high). This is to allow the battery voltage to build up and the voltage control to reach its "working point." This point will be when the voltmeter needle has ceased to climb and remains steady or perhaps oscillates slightly (too much oscillation can mean point point contact).

Consulting our specifications, we find that on all Ford product regulators the voltage control setting is from 7.0 to 7.4 at a temperature of 70 to 80 degrees F. with cover in place. If the voltmeter reading is not within those limits, it will be necessary to bend the spring support arm to change the tension of the spring, which will alter the working voltage of the regulator. In setting the voltage control, it is necessary that the generator be charging from eight to ten amperes. If the charging rate is not within these limits, it may be necessary to turn on lights or adjust the resistance knob of the test instrument to obtain this reading on the ammeter.

When the voltage reading is at last within the proper limits, we are still not finished with it. The regulator must be "cycled," that is, the engine allowed to idle and again revved up to the working point of the regulator. This cycling is necessary to make sure the voltage will not climb beyond the point of our previous setting. If we

Generator Regulator Specifications

	Ford-Mercury	Lincoln
Voltage (70 to 80° F.)	7.0-7.4 volts	7.0-7.4 volts
Current limit	34-38 amperes	38-42 amperes
Cut-out closing voltage	6.0-6.4 volts	6.0-6.4 volts
Ampères to open	0-3.0 amperes	0-3.0 amperes
Air gap (regulator armature to core)	.032-.035 inch	.032-.035 inch
Air gap (cut-out armature to core)	.014 inch	.014 inch

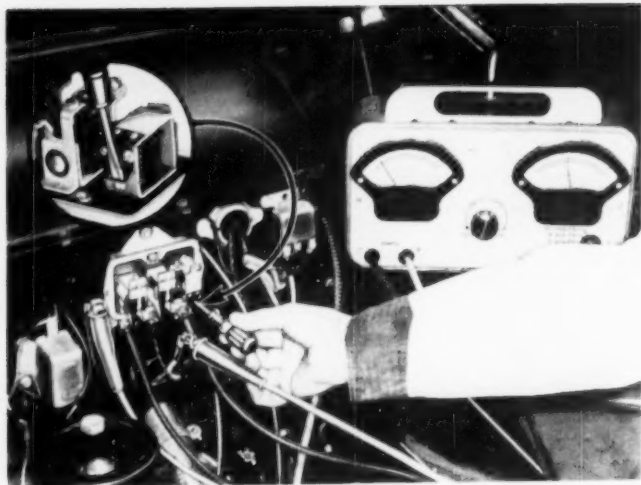


Fig. 3—Adjusting generator cut-out.

are wise, we will reset the voltage if needed and again cycle the regulator a time or two before the final adjustment is arrived at.

Because the steel covers used on the late-type units affect the magnetism of their windings, the voltage with cover off will be approximately two tenths of a volt greater than with cover in place. Thus to obtain a setting of 7.4 with cover in place, it will be necessary to set regulator 7.6 with cover removed.

The "cut in" point of the cut out or relay is next in order for checking and, if need be, adjusting. Again consulting the specifications, we find this unit must close at from 6.0 to 6.4 volts and open at from 0 to 8.0 amperes discharge current.

For this check we use a slightly different hookup of the instrument leads, though it would be possible to use the same one. The voltmeter negative lead is brought from the battery terminal of the regulator to the armature terminal, the other leads being left as they were. (This is the hookup shown in Fig. 3.) It may be necessary to reduce the engine speed below its normal idle to obtain the conditions we require, that is, no loading on the voltmeter or ammeter.

When this is done, we slowly increase the speed of the engine while watching the meters. The voltmeter should show a slow and steady increase in voltage until the needle drops back slightly, then goes ahead again. At the same time this deflection of the voltmeter occurs, the ammeter should indicate a slight movement. This is the point at which

the cut-out points close—in other words, the "cut in" point or the instant at which the generator starts sending current to the battery. Just yesterday we read of using earphones to listen for the click of the points' closing. The idea sounds fine, but in this case we have no earphones so must depend on the method just described and watch the instruments.

Should point-closing not be within the specifications, it is necessary to bend the spring support shown in Fig. 3. Decreasing the spring tension allows the points to close at a lower

voltage; increasing has, of course, the opposite effect.

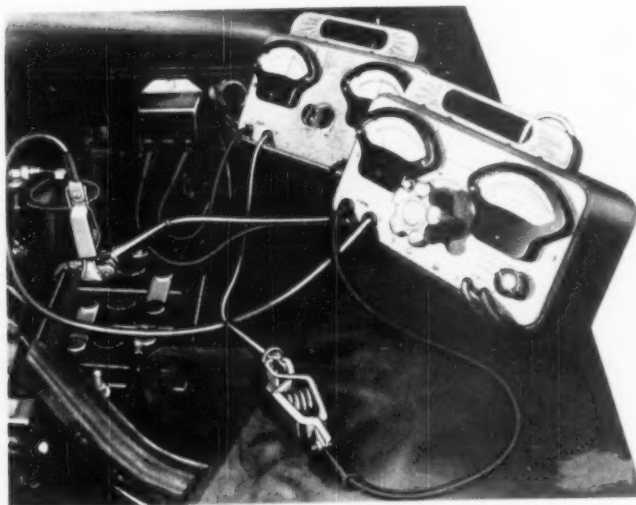
It is not enough to be sure the cut-out points are closing properly; we must also make sure they will open when the engine is stopped and not discharge the battery through the generator. To make this check the engine speed is slowly reduced while watching the ammeter. When the needle reads between zero and 5.0 amperes discharge, the points should open and the ammeter return to zero. Improper air gap or pitted points are more likely to be the cause of failure of the points to open properly than is the spring tension of the armature.

There is one more unit to check and perhaps adjust before we can call this regulator properly serviced and ready to go back to the road. That's the current limiter. As on most other regulators, this current limiter is there solely as a safeguard. In case something happens to the voltage control, the current limiter, if working properly, can prevent damage to the generator. It is seldom found out of adjustment, but we should at least know how to service this unit.

More than one method can be used in checking the current limiter. In this case we could use the same instruments and hookup shown in Fig. 2, turning on all lights, radio, etc., perhaps pushing the starter button to create a load above that for which the current limiter should be set. For purposes of illustration, however, we are going to use the method shown in Fig. 4. Here the negative lead of

(Continued on page 112)

Fig. 4—Connections for adjusting current limiter.



HEAD LIGHT
PARKING LIGHT
HORN

LEGEND:
 B—Black
 BL—Blue
 B BL—Black with Blue Tracer
 B O—Black with Orange Tracer
 B R—Black with Red Tracer
 B W—Black with White Tracer
 B Y—Black with Yellow Tracer
 BL B—Blue with Black Tracer
 BL O—Blue with Orange Tracer
 BL R—Blue with Red Tracer
 BL W—Blue with White Tracer
 BL Y—Blue with Yellow Tracer
 G—Green
 G B—Green with Black Tracer
 G R—Green with Red Tracer
 G Y—Green with Yellow Tracer
 R B—Red with Black Tracer
 R BL—Red with Blue Tracer
 R G—Red with Green Tracer
 R W—Red with White Tracer
 R Y—Red with Yellow Tracer
 Y—Yellow
 Y B—Yellow with Black Tracer
 Y G—Yellow with Green Tracer
 Y R—Yellow with Red Tracer
 W—White
 W R—White with Red Tracer

COMPONENTS:
 1. CIGAR LIGHTER
 2. OVERDRIVE GOVERNOR
 3. CONVERTIBLE TOP CONTROL SWITCH
 4. HYDRO MOTOR
 5. ENGINE TO DASH BOND
 6. DISTRIBUTOR
 7. STARTER
 8. SPARK PLUGS
 9. OIL PRESSURE SENDER
 10. GENERATOR
 11. ENGINE TEMPERATURE SENDER
 12. COIL
 13. BREAKER
 14. RELAY
 15. CIRCUIT BREAKER
 16. THROTTLE SWITCH
 17. SOLENOID
 18. LOCKOUT SWITCH
 19. IGNITION SWITCH
 20. IGNITION LOCK
 21. CLOCK LIGHTS
 22. CLOCK
 23. AMMETER
 24. INSTRUMENT CLUSTER LIGHTS
 25. HIGH BEAM INDICATOR
 26. DOME LIGHT
 27. ISATION (WAGON)
 28. FUEL LEVEL SENDER
 29. DOME LIGHT SWITCH
 30. DOME LIGHT
 31. TAIL LIGHT
 32. STOP LIGHT SWITCH
 33. STOP LIGHT
 34. STARTER RELAY
 35. BATTERY
 36. REGULATOR
 37. HORN RELAY
 38. HORN
 39. PARKING LIGHT
 40. HEAD LIGHT
 41. DOME LIGHT
 42. TAIL LIGHT
 43. STOP LIGHT
 44. STARTER
 45. STARTER BUTTON
 46. LIGHTING SWITCH
 47. INSTRUMENT PANEL
 48. LIGHT SWITCH
 49. DIMMER SWITCH
 50. FOOT DIMMER SWITCH

Ford

Studebaker's progress is red hot news!

"Not only has Studebaker boosted its own total output, it has nearly doubled its share of the total automobile market."

... CHICAGO JOURNAL OF COMMERCE

"... Studebaker increased its sales about 30% and marched into fourth place in the industry, right behind the big three."

... TIME

"Probably the most spectacular production performance of the year has been by Studebaker."

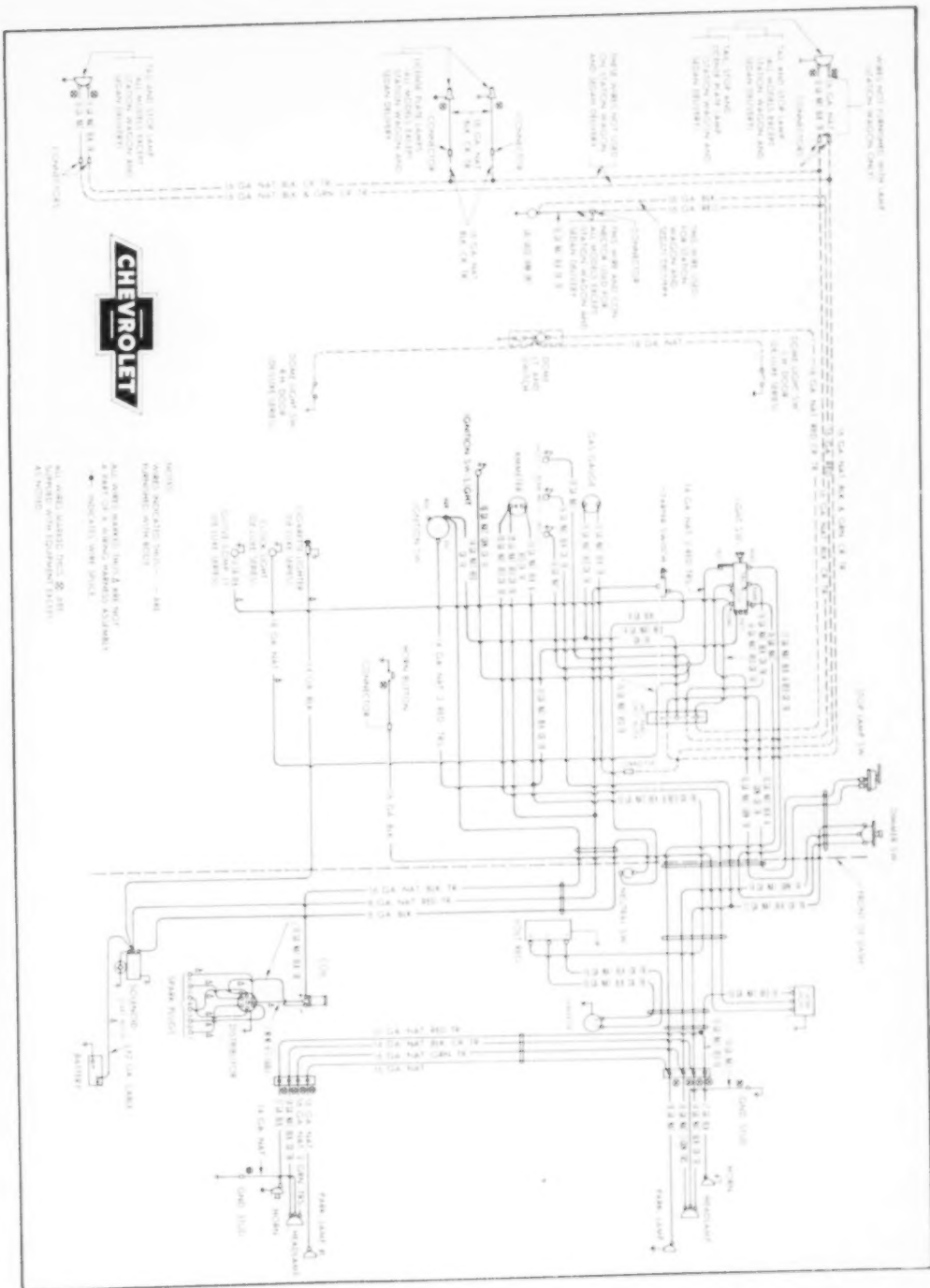
... ASSOCIATED PRESS

"The Studebaker's outstanding performance characteristics, especially its fuel economy and endurance, are some of the reasons cited for its wide acceptance."

... WARD'S AUTOMOTIVE REPORTS

**Editors know it! Dealers know it!
The public knows it!**

STUDEBAKER'S REALLY ROLLING!



CURRENT PASSENGER-CAR SPECIFICATIONS

Engine and Equipment

ENGINE

MAKE AND MODEL	Std. Wheelbase	No. Cylinders and Valve Arrangement	Bore and Stroke	Taxable H. P.	Max. Rated H. P. at R. P. M.	Cams Shaft Drive	Main Bearings	RINGS		OIL		Air Cleaner	Oil Filter	Vibra. Damper	Carburetor
								No. and Size Comp.	No. and Size Oil	Crankcase (qts.)					
BUICK 40 Special	121 $\frac{1}{2}$	8J	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	30.63	115@3600	LB	5	2-.0937	1-1.875	6 $\frac{1}{2}$		AC	Y	Y	St-Ca
BUICK 50 Super except Model 52	121 $\frac{1}{2}$	8J	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	32.51	124@3600	LB	5	2-.0937	1-1.875	6 $\frac{1}{2}$		AC	Y	Y	St-Ca
BUICK Model 52	125 $\frac{1}{2}$	8J	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	32.51	124@3600	LB	5	2-.0937	1-1.875	6 $\frac{1}{2}$		AC	Y	Y	St-Ca
BUICK 70 Roadmaster except Model 72	126 $\frac{1}{4}$	8J	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	37.81	152@3600	LB	5	2-.0937	1-1.875	8		AC	Y	Y	St-Ca
BUICK Model 72	130 $\frac{1}{4}$	8J	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	37.81	152@3600	LB	5	2-.0937	1-1.875	8		AC	Y	Y	St-Ca
CADILLAC 61	126	8J	3 $\frac{1}{2}$ x 3 $\frac{3}{4}$	46.5	160@3800	LB	5	2-.0781	1-1.875	5		AC	N	Y	Ca
CADILLAC 62	126	8J	3 $\frac{1}{2}$ x 3 $\frac{3}{4}$	46.5	160@3800	LB	5	2-.0781	1-1.875	5		AC	N	Y	Ca
CADILLAC 60-S	133	8J	3 $\frac{1}{2}$ x 3 $\frac{3}{4}$	46.5	160@3800	LB	5	2-.0781	1-1.875	5		AC	N	Y	Ca
CADILLAC 75	136 $\frac{1}{4}$	8J	3 $\frac{1}{2}$ x 3 $\frac{3}{4}$	46.5	160@3800	LB	5	2-.0781	1-1.875	5		AC	N	Y	Ca
CHEVROLET Styleline and Fleetline Sp. & DeLuxe	115	6J	3 $\frac{1}{2}$ x 3 $\frac{3}{4}$	29.4	92@3400	G	4	2-.1237	1-1.863	5		AC	N ¹	Y	RP
CHEVROLET Sty. & Fleet. with Powerglide Drive	115	6J	3 $\frac{1}{2}$ x 3 $\frac{3}{4}$	39.4	105@3600	G	4	1-.1237 1-.0932	1-1.863	5		AC	N ¹	Y	RP
CHRYSLER Royal & Windsor	125 $\frac{1}{2}$	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	28.36	116@3600	Ch	4	2-.0937	2-1.562	5		b	Y	Y	Ca
CHRYSLER Saratoga & N. Y.	131 $\frac{1}{2}$	8I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	33.8	135@3200	Ch	5	2-.0937	2-1.562	6		AC	Y	Y	Ca
CHRYSLER Crown Imperial	145 $\frac{1}{2}$	8I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	33.8	135@3200	Ch	5	2-.0937	2-1.562	6		AC	Y	Y	Ca
CROSLLEY Model CD	80	4J	2 $\frac{1}{2}$ x 2 $\frac{1}{4}$	10	26.5@5400	G	5	2-.0625	2-1.55	2		AC	Y	N	T
DeSOTOS-14 DeLx & Custom	125 $\frac{1}{2}$	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	28.36	112@3600	Ch	4	2-.0937	2-1.562	5		b	Y	Y	Ca
DODGE Coronet & Meadow	123 $\frac{1}{2}$	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	25.35	103@3600	Ch	4	2-.0937	2-1.562	5		b	Y	Y	St
DODGE Wayfarer	115	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	25.35	103@3600	Ch	4	2-.0937	2-1.562	5		b	N	N	St
FORD & Custom 8 Cyl.	114	8I	3 $\frac{1}{2}$ x 3 $\frac{3}{4}$	32.5	100@3600	G	3	2-.093	2-1.86	5		Y	N ¹	Y	Own
FORD & Custom 6 Cyl.	114	6I	3.3 x 4.4	26.1	95@3300	G	4	2-.093	2-1.86	5		Y	Y	Y	Ho
FRAZER	123 $\frac{1}{2}$	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	26.3	112@3600	Ch	4	2-.0935	2-1.550	5		AC	Y	Y	Ca
HUDSON Pacemaker	119	6I	3 $\frac{1}{2}$ x 3 $\frac{3}{4}$	30.4	112@4000	Ch	4	2-.078	2-1.875	7 $\frac{1}{2}$		AC	N	Y	Ca
HUDSON Super 6	123 $\frac{1}{2}$	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	30.4	123@4000	Ch	4	2-.078	2-1.875	7 $\frac{1}{2}$		AC	N	Y	Ca
HUDSON Super 8	123 $\frac{1}{2}$	8I	3 x 4 $\frac{1}{4}$	28.8	128@4200	G	5	2-.093	2-1.875	8		AC	N	Y	Ca
KAISER Special	123 $\frac{1}{2}$	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	26.3	100@3600	Ch	4	2-.0935	2-1.550	5		AC	Y	Y	Ca
KAISER DeLuxe	123 $\frac{1}{2}$	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	26.3	112@3600	Ch	4	2-.0935	2-1.550	5		AC	Y	Y	Ca
LINCOLN Cosmopolitan	125	V8	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	39.2	152@3600	G	3	2-.0933	1-1.86	6 $\frac{1}{2}$ **		AC	Y	Y	Ho
LINCOLN	121	V8	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	39.2	152@3600	G	3	2-.0933	1-1.86	6 $\frac{1}{2}$ **		AC	Y	Y	Ho
MERCURY	118	V8	3 $\frac{1}{2}$ x 4	32.5	110@3600	G	3	2-.0933	2-1.86	D		AC	Y	Y	Ho
NASH Statesman	112	6I	3 $\frac{1}{2}$ x 4	23.44	85@3800	Ch	4	2-.0930	2-1.547	5		AC	N	Y	Ca
NASH Ambassador	121	6J	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	27.34	115@3400	Ch	7	2-.0930	2-1.547	6		AC	N	Y	Ca
OLDSMOBILE 76	119 $\frac{1}{2}$	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	29.9	105@3400	LB	4	2-.0937	2-1.875	5		AC	N	Y	Ca
OLDSMOBILE 88 & 98	119 $\frac{1}{2}$	8J	3 $\frac{1}{2}$ x 3 $\frac{3}{4}$	45.0	135@3600	LB	5	2-.087	1-1.875	5		AC	N	Y	V
PACKARD 8	120	8I	3 $\frac{1}{2}$ x 3 $\frac{3}{4}$	39.2	135@3600	Ch	5	2-.0233	1-0.935	7		AC	N	Y	Ca
PACKARD Super	127	8I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	39.2	150@3600	Ch	5	2-.0233	1-0.935	7		AC	N	Y	Ca
PACKARD Custom	127	8I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	39.2	190@3600	Ch	9	2-.0233	1-0.935	7		AC	Y	Y	Ca
PLYMOUTH P-19 DeLuxe	111	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	25.35	97@3600	Ch	4	2-.0937	2-1.562	5		f	N	N	Ca
PLYMOUTH P-20 DeLuxe & Sp. DeLuxe	118 $\frac{1}{2}$	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	25.35	97@3600	Ch	4	2-.0937	2-1.562	5		f	Y	N	Ca
PONTIAC 6	120	6I	3 $\frac{1}{2}$ x 4	30.4	90@3400	M	4	2-.0937	1-1.875	5		AC	N	Y	Ca
PONTIAC 8	120	8I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	36.4	108@3600	M	5	2-.0937	1-1.875	5		AC	N	Y	Ca
STUDEBAKER Champ 9G	113	6I	3 x 4	21.6	85@4000	G	4	d	1-1.562	5		AC	A	Y	Ca
STUDEBAKER Cmdr 17A	120	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	26.33	102@3200	G	4	2-.0937	1-1.875	6		AC	Y	Y	St
STUDEBAKER Land C 17A	124	6I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	26.33	102@3200	G	4	2-.0937	1-1.875	6		AC	Y	Y	St
WILLYS Jeepster & Sta. Wag	104	4I	3 $\frac{1}{2}$ x 4 $\frac{1}{4}$	15.6	63@4000	G	3	2- $\frac{3}{16}$ "	1- $\frac{3}{16}$ "	4		AC	Y	N	Ca-Zn
WILLYS Station Sedan	104	6I	3 x 3 $\frac{1}{2}$	21.6	72@4000	G	4	2- $\frac{3}{16}$ "	1- $\frac{3}{16}$ "	5		AC	Y	Y	Ca-Zn

ABBREVIATIONS

** 6 $\frac{1}{2}$ dry, 6 refill

A - Accessory

AC - A.C. Spark Plug

b - A. C. and Industrial Wire Cloth

Products

Ca - Carter

Ch - Chain

D - 6 dry, 5 refill

J - Top 4937, Middle 125

F - A. C. United Separators and In-

dustrial Wire Cloth Products

G - Gaze

Ho - Holly

I - I. Head motor

J - Overhead valve

LB - Link Belt

M - Morse

N¹ - Optional at extra cost

N - No

RP - Rochester

Products

St - Stromberg

T - Tillotson

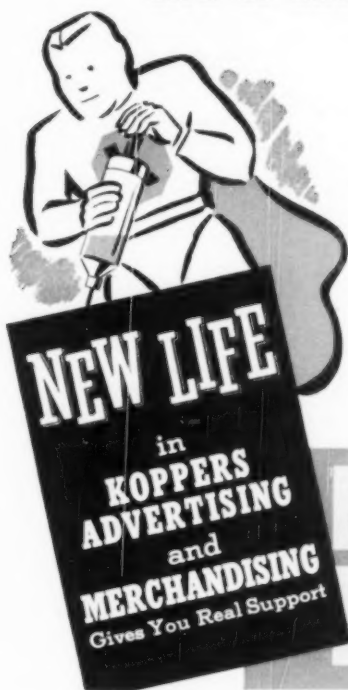
V - Various

V - V

Zn - Zenith

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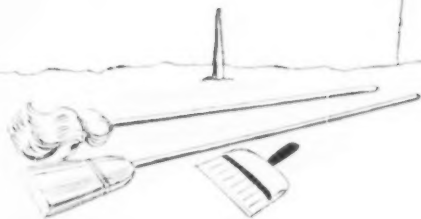
CURRENT PASSENGER-CAR SPECIFICATIONS

Timing, Battery, Brakes, Etc.

MAKE AND MODEL	IGNITION AND TIMING							Battery		Clutch Facings		Brakes	
	Breaker Gap (in.)	Spark Plug Gap (in.)	Tappet Clearance Intake (in.)	Tappet Clearance Exhaust (in.)	Intake Valve Opens b or a TDC	Cam Angle (degrees)	Breaker Point Arm Ten sion (ozs.)	Cyl. Head Bolt Tension (ft. lbs.)	Cap. and Ter. Gd.	Cool. System Qts. No heater	Make Thickness Outside Diameter Inside Diameter	Type	Parking Brake
BUICK 40 Special	15	25	15h	15h	13°b	X	19-23	65-70W	100N	13	L Bb .125 10 6	H	RW
BUICK 50 Super	15	25	d	d	13°b	X	19-23	65-70W	100N	13	L Bb .125 10 6	H	RW
BUICK 70 Roadmaster	15	25	d	d	14°b	X	19-23	65-70W	120N	17½	N none used	H	RW
CADILLAC 61	15	33-38	au	au	19°b	31	19-23	70-75W	115N	18	L .137 10½ 7	H	RW
CADILLAC 62	15	33-38	au	au	19°b	31	19-23	70-75W	115N	18	L .137 10½ 7	H	RW
CADILLAC 60-8	15	33-38	au	au	19°b	31	19-23	70-75W	115N	18	L .137 10½ 7	H	RW
CADILLAC 75	15	33-38	au	au	19°b	31	19-23	70-75W	115N	18	L .137 11 7	H	RW
CHEVROLET Styleline and Fleetline Sp. & DeLuxe	18	35	06h	13h	1°a	34	17-21	70-80W	100N	15	O .135 9½ 6½	H	RW
CHEVROLET Sty. & Fleet. (with Powerglide Drive)	18	35	d	d	16°b	34	17-21	70-80W	100N	16	N none used	H	RW
CHRYSLER Royal & Windsor	20	35	08h	10h	12°b	34½-38	17-20	EW	130P	17	Bb .125 9¼ 6	H	Ps
CHRYSLER Saratoga & N. Y.	18	35	08h	10h	12°b	27-30½	17-20	EW	135P	21	Bb .125 10 6	H	Ps
CHRYSLER Crown Imperial	18	35	08h	10h	12°b	27-30½	17-20	EW	135P	21	Bb .125 10 6	H	Ps
CROSLEY Model CD	20	25	04	06	5°b	46	17-20	No	90P	4	O .125 6 4	G	AW
DeSOTO S-14 DeLx. & Custom	20	35	08h	10h	12°b	34½-38	17-20	EW	114P	17	Bb .125 9¼ 6½	H	Ps
DODGE Cor., Mead & Way	20	35	08h	10h	8°b	31½-38	17-20	EW	105P	15	Bb .125 9¼ 6	H	Ps
FORD & Custom 8 Cyl.	14-16	28-32	13-15	17-19	5°b	26-28½	17-20	65-70	90P	22	L .125 9¼ 6	H	RW
FORD & Custom 6 Cyl.	24-26	28-32	9-11	13-15	11°b	35-38	17-20	65-70	100P	17½	L .125 9½ 6	H	RW
FRAZER	20	32	10c	14c	10°b	38	17-20	30-35c	105P	13½	T .125 9¼ 6	H	RW
HUDSON Pacemaker	20	32-45	08h	10h	7½°b	38	17-20	70-75W	100P	18½	O .203 9½ 6½	D	RW
HUDSON Super 6	20	32-45	08h	10h	7½°b	38	17-20	70-75W	120P	19½	O .203 9½ 6½	D	RW
HUDSON Super 8	17	32-45	08h	10h	10½°b	27	17-20	45-50W	120P	17½	O .203 9½ 6½	D	RW
KAISER Spec. & DeLuxe	20	32	10c	14c	10°b	38	17-20	30-35c	100P	15	Bb .125 9¼ 6	H	RW
LINCOLN Cosmopolitan	14-16	24-26	au	au	5°b	26-28½	17-20	65-70	120P	34½	L .125 10½ 7	S	RW
LINCOLN	14-16	24-26	au	au	5°b	26-28½	17-20	65-70	120P	34½	L .125 10½ 7	S	RW
MERCURY	14-16	24-26	11c	15c	10°b	26-28½	17-20	65-70	100P	22¼	Bb .125 10 6½	S	RW
NASH Statesman	18-24	30	15	15	6°b	35	17-21	60W	90P	14	Bb .125 8 5½	H	RW
NASH Ambassador	18-24	30	15	18	6½°b	35	17-21	70W	105P	17	Bb .125 10 7	S	RW
OLDSMOBILE 76	20	40	08h	11h	5°b	35	17-21	60-70W	100N	18½	Bb .125 10 7	H	RW
OLDSMOBILE 88 & 98	12-17½	30	—	—	14°b	22	19-23	60-70W	115N	21½	—	H	RW
PACKARD 8	15	27	07	10	12½°b	U	17-20	60-62	100P	18	L .125 10 6½	H	RW
PACKARD Super	15	27	07	10	12½°b	U	17-20	60-62	100P	19	L .125 10½ 7	H	RW
PACKARD Custom	15	27	au	au	U	27	17-20	60-62	120P	19	L au au	au	H
PLYMOUTH P-19 DeLuxe	20	35	08h	10h	12°b	34½-38	17-20	EW	100P	15	Bb .125 9¼ 6½	H	Ps
PLYMOUTH P-20 DeL. & Sp. DeL.	20	35	08h	10h	12°b	34½-38	17-20	EW	100P	15	T .125 9¼ 6	H	Ps
PONTIAC 6	22	25	11-13	11-13	5°b	35	17-21	60W	100N	18	Im .125 9¼ 6	S	RW
PONTIAC 8	16	25	11-13	11-13	5°b	26	19-23	60W	100N	20½	Im .125 10 6	S	RW
STUDEBAKER Champ 9G	20	22-27	16c	16c	15°b	39½	17-20	46-50W	100P	10	Bb .125 8 5½	H*	RW
STUDEBAKER Comdr. 17A	22	22-27	16c	16c	15°b	31-37	17-21	80-85W	100P	13½	Bb .125 9¼ 6	H*	RW
STUDEBAKER Land C. 17A	22	22-27	16c	16c	15°b	31-37	17-21	80-85W	100P	13½	Bb .125 9¼ 6	H*	RW
WILLYS Jeepster & Sta. Wag	20	30	14	14	9°b	39	17-20	60-65	100N	11	Bb .135 8½ 5½	H	RW
WILLYS Station Sedan	20	30	14	14	5°b	34½	17-20	60-65	100N	9	Bb .135 8½ 5½	H	RW

ABBREVIATIONS

1-36" on DeLx. with std. 3-speed transmission.	d Hydraulic valve lifters	L Long Mfg.	valves. Valves open at degrees shown. Not used on Custom.
2-17" on DeLx. with std. 3-speed transmission.	D Duo Automatic	N Negative	
* Self-adjusting, self-centering add 1 qt.	E Note 52 to 57, cap screws 65 to 70	O Own	
a-After	f without heater. With heater add 1 qt.	P Positive	
au Automatic	G Hydraulic Spd-Dis.	Ps Propeller shaft, rear transmission.	W Warm
AW-All Wheels	H Hydraulic	RW Rear service brake	X Do not recommend using dwell meter for setting breaker point gap
b-Before	I Hot	S Duo Servo	y Tolerance of one degree, plus or minus, allowed in adjusting
Bb-Borg & Beck	Im Inland Mfg.	T Borg & Beck, and Auburn	Z Auto-Lite 27, Delco 31
c-Cold	K Hydraulic disc type	U Clearance for timing inlet	



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SOUTHERN AUTOMOTIVE JOURNAL for FEBRUARY, 1950



The Lincoln six-passenger coupe has an improved Hydra-Matic transmission and a high-compression V-type 152-horsepower power plant.

1950 Lincolns Feature Improved Steering

THE 1950 Lincolns, introduced January 26, have a 15 per cent reduction in steering effort through refinements and changes in the steering mechanism. Benson Ford, vice-president and general manager of the Lincoln Mercury Division, said in making the announcement.

A 50 per cent more efficient hand-brake of the straight pull type and better oil economy through three-ring pistons are other mechanical features. The rings are said to give better temperature control and a more stable piston.

A three-point wedge belt drive reduces slippage and give uniform water pump performance. A five-bladed fan, which operates at 16 per cent slower speed, reduces noise level.

Has Heavier Frame

The 1950 models have heavier frames for greater rigidity. Noise-reducing, puck-type engine mounts are another feature.

The door locks and radio receiver have been improved and the gearshift knob has been redesigned for greater ease of handling.

Better engine performance has been achieved by improvements in the carburetor, automatic choke and spark control. These refinements are said to make the engine start in less than two seconds at zero temperatures.

Idling speeds are lower when engine is started after standing, giving a minimum of creep when starting a warm engine equipped with the Hydra-Matic transmission.

There are new courtesy lights in the front and rear. Parking lights have been redesigned, using plastic lenses which are less apt to break.

Fiberglass sound-proofing insulation is now used both as a roof pad and behind the dash to reduce engine noise to a minimum.

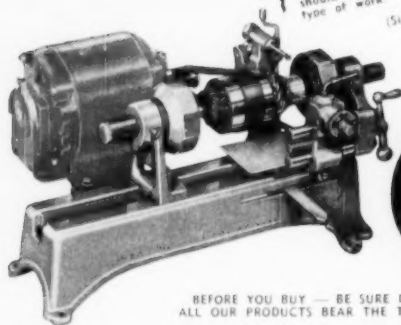
Fresh air tubes have been taken out of the engine compartment and relocated in the wheel housing. A redesigned air inlet to the side cowl provides ventilation across the driver's feet and nearly doubles the air supply for summer driving, company engineers said.

About 50 per cent more warm air is forced into the car by the addition of a larger blower on the heater.

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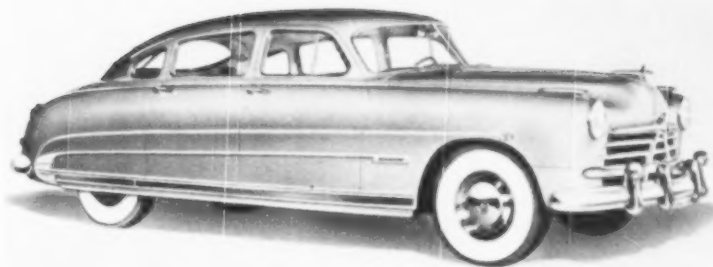
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The 1950 Hudson Commodore Custom Eight sedan is five feet high and features "step-down" design and Monobilt body-and-frame construction. A number of refinements in both exterior and interior styling have been incorporated in the line.



More Powerful Engine Highlights Hudsons

AN IMPROVED L-head, high-compression Super Six engine, rated at 123 horsepower, is being used on the 1950 Hudsons. The companion Super Eight engine is now rated at 128 horsepower.

The Super Six is pressure-lubricated by a system to reduce recirculation of sludge. It has a bore of 3 9/16 inches and a stroke of 4 3/8 inches with a displacement of 262 inches. Compression ratio is 7.2 to one with a high-compression aluminum head.

Tappets are newly designed mushroom type and are pressure-lubricated. Positive rotation of tappets is assured by use of an angular cam surface, increasing tappet life and adding to quieter operation, company engineers said.

A cooling system of the closed pressure type has been introduced in the new models. Operating at a pressure of seven pounds, this system is said to prevent overheating in slow-moving traffic. Improvements in the cellular-tubular radiator, coupled with a long-life water-pump seal, give better engine cooling without loss of coolant.

Transmissions have been redesigned to permit easier, smoother shifting at all speeds. The Fluid Cushion, single-plate clutch has been re-engineered to reduce the possibility of grabbing or chattering. The oil-pump gear has been redesigned to give longer life through surface treatment of the face of the pump and camshaft gears.

The Super-matic drive, an automatic transmission which can be changed to conventional drive by the touch of a button on the instrument panel, is available as optional equipment.

Improved operation of overdrive has been made possible through use of a larger steady bearing at the planet gear, a simplified relay and solenoid equipment, as well as the addition of

a fuse to the system.

The ignition system of the 1950 cars has been improved. A neoprene-covered high-tension cable used on the spark-plug wires is water-resistant. Spark-plug seals are provided to reduce starting failure due to high humidity condensation.

The ignition coil is placed closer to the distributor, providing a better spark, permitting better water-proofing and reducing interference with radio and television receivers. A new high-capacity shunt-type generator gives higher output at lower speeds. A high-torque starter gives faster starts in cold or wet weather.

No-Oil-Change Filter Developed for Car

A FILTER which permits a car to be driven without ever changing the motor oil has been developed, according to J. E. Housley, power manager at Maryville, Tenn., for the Aluminum Co. of America.

The filter does not maintain oil supply, he said, and it must be replenished as it is spent by the engine. Cars of three different makes were driven 40,000 miles with the treaters and bearings were not pitted as they ordinarily would become after 18,000 miles, Housley said.

The cartridge contains activated alumina, a porous substance obtained in processing aluminum ore.

Obtaining Better Service From "Wet" Batteries

A RECENT service bulletin from The Studebaker Corp. gives the following maintenance tips on "wet" batteries:

"Wet" batteries, those which have been filled with distilled water, cannot stand neglect and must receive regular care if they are to provide full service life to the purchaser. Such batteries as those in showroom display vehicles, vehicles in storage, units for sale of your used-car and truck lot

and, in some cases, those in display racks in your parts department—all must receive regular inspection, test and service to keep them active and charged.

When a storage battery is fully charged, the electrolyte is at its maximum strength or highest specific gravity. When the battery is partly discharged, a portion of the electrolyte combines with the active material on the plates to produce a sulphated condition. On charging the battery, this process is reversed and the sulphate is transferred back to the electrolyte.

Batteries should not be permitted to stand for any length of time in a sulphated condition or damage to the plates may result.

The following preventive maintenance precautions should insure fully-charged batteries at all times. Perhaps the service manager will want to give to one man the assignment of battery care, selecting, for example, the first and fifteenth day of each month for this man to check all the batteries in the dealership.

1.—Check water level in each cell. If level is too low, add distilled water as required to reach proper level and make no further tests until the following day.

2.—With a hydrometer, preferably one which includes a temperature correction scale, test specific gravity of electrolyte in each cell.

Specific gravity of electrolyte corrected to 80° F. indicates following condition of cell:

Sp. Gr.	State of Charge
1.280	Fully charged
1.250	75% charged
1.220	50% charged
1.190	25% charged
1.170	Discharged

3.—If specific gravity corrected reading is 1.250 or less, recharge the battery.

4.—If battery is to be delivered before next test period, specific gravity should be brought to 1.270 or above, according to the bulletin.



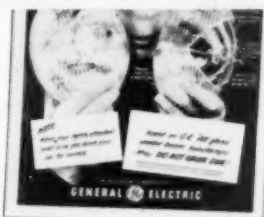
CHECK UP



Ad campaign includes 2-page spread in Mar. 18 Saturday Evening Post ...



GENERAL ELECTRIC'S SPRING AUTO



... full page in Collier's Apr. 29 ... half page, Collier's Mar. 11.

CHECK THE LIGHTS OF EVERY CAR LEFT FOR
OUT OF EVERY 6*! DEALERS' PROFITS LAST



New Manual—22 pages, 170 illustrations.



Colorful 4-ft. streamer that you can hang on the wall or in a window to help boost changeover-time profits.

THIS YEAR'S PROMOTION IS BACKED BY THE STRONGEST
STOCK UP... TIE IN... GET STARTED NOW!

* Survey by Police Chiefs' Association reveals that one car out of every six needs essential lamps.

'N RING UP!



LAMP PROMOTION STARTS MARCH 1ST!

YEAR—MODEL	2 HEADS	2 SIDE	2 FOG	2 TAIL	2 STOP	2 TURN	2 HORN	2 BATTERY	2 WIPER
1950—1951	100	100	100	100	100	100	100	100	100
1952—1953	100	100	100	100	100	100	100	100	100
1954—1955	100	100	100	100	100	100	100	100	100
1956—1957	100	100	100	100	100	100	100	100	100
1958—1959	100	100	100	100	100	100	100	100	100
1960—1961	100	100	100	100	100	100	100	100	100
1962—1963	100	100	100	100	100	100	100	100	100
1964—1965	100	100	100	100	100	100	100	100	100
1966—1967	100	100	100	100	100	100	100	100	100
1968—1969	100	100	100	100	100	100	100	100	100
1970—1971	100	100	100	100	100	100	100	100	100
1972—1973	100	100	100	100	100	100	100	100	100
1974—1975	100	100	100	100	100	100	100	100	100
1976—1977	100	100	100	100	100	100	100	100	100
1978—1979	100	100	100	100	100	100	100	100	100
1980—1981	100	100	100	100	100	100	100	100	100
1982—1983	100	100	100	100	100	100	100	100	100
1984—1985	100	100	100	100	100	100	100	100	100
1986—1987	100	100	100	100	100	100	100	100	100
1988—1989	100	100	100	100	100	100	100	100	100
1990—1991	100	100	100	100	100	100	100	100	100
1992—1993	100	100	100	100	100	100	100	100	100
1994—1995	100	100	100	100	100	100	100	100	100
1996—1997	100	100	100	100	100	100	100	100	100
1998—1999	100	100	100	100	100	100	100	100	100
2000—2001	100	100	100	100	100	100	100	100	100
2002—2003	100	100	100	100	100	100	100	100	100
2004—2005	100	100	100	100	100	100	100	100	100
2006—2007	100	100	100	100	100	100	100	100	100
2008—2009	100	100	100	100	100	100	100	100	100
2010—2011	100	100	100	100	100	100	100	100	100
2012—2013	100	100	100	100	100	100	100	100	100
2014—2015	100	100	100	100	100	100	100	100	100
2016—2017	100	100	100	100	100	100	100	100	100
2018—2019	100	100	100	100	100	100	100	100	100
2020—2021	100	100	100	100	100	100	100	100	100
2022—2023	100	100	100	100	100	100	100	100	100
2024—2025	100	100	100	100	100	100	100	100	100
2026—2027	100	100	100	100	100	100	100	100	100
2028—2029	100	100	100	100	100	100	100	100	100
2030—2031	100	100	100	100	100	100	100	100	100
2032—2033	100	100	100	100	100	100	100	100	100
2034—2035	100	100	100	100	100	100	100	100	100
2036—2037	100	100	100	100	100	100	100	100	100
2038—2039	100	100	100	100	100	100	100	100	100
2040—2041	100	100	100	100	100	100	100	100	100
2042—2043	100	100	100	100	100	100	100	100	100
2044—2045	100	100	100	100	100	100	100	100	100
2046—2047	100	100	100	100	100	100	100	100	100
2048—2049	100	100	100	100	100	100	100	100	100
2050—2051	100	100	100	100	100	100	100	100	100
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2074—2075	100	100	100	100	100	100	100	100	100
2076—2077	100	100	100	100	100	100	100	100	100
2078—2079	100	100	100	100	100	100	100	100	100
2080—2081	100	100	100	100	100	100	100	100	100
2082—2083	100	100	100	100	100	100	100	100	100
2084—2085	100	100	100	100	100	100	100	100	100
2086—2087	100	100	100	100	100	100	100	100	100
2088—2089	100	100	100	100	100	100	100	100	100
2090—2091	100	100	100	100	100	100	100	100	100
2092—2093	100	100	100	100	100	100	100	100	100
2094—2095	100	100	100	100	100	100	100	100	100
2096—2097	100	100	100	100	100	100	100	100	100
2098—2099	100	100	100	100	100	100	100	100	100
2100—2101	100	100	100	100	100	100	100	100	100



New Lamp Guide lists right G-E lamps for every socket . . . for every car. It's handy, easy to use.

Lampholder puts "sell" in windows, counters.

CHANGEOVER! RING UP EXTRA SALES ON 1 CAR
YEAR PROVE IT PAYS!



Big, action-getting poster for inside or out.



Handy, Snap-on Memo Card.



Aiming Screen and Sign Screen—\$2.50 (other sales aids free).

ADVERTISING AND SALES HELPS EVER.

To get your Spring Auto Lamp Promotion Package, with all the sales aids shown here, call your G-E Lamp supplier.

GENERAL  ELECTRIC

Readers are invited to contribute to—

SHOP TALK—

LIKES "BEEF" OUTLET

Dear Bill:

Your idea of a monthly column on something like "Letters to the Editor" is an excellent one. Our human make-up is such that an outlet for a "beef" here and there not only unloads our mind for more productive thinking but also serves as a consol-

ation to the reader that he has company in his misery.

Bill, I have noticed a definite tendency in the last few months by some expense-minded dealers to term some of their business investments as expenses and in some cases the best investment of them all is getting the axe first. I have reference to automobile association dues, whether they be

A column of informal comments about the automotive trade and its problems.

local, state or national. At no time in the history of the retail automobile industry has cooperative moral and financial support been so necessary as now or in the months and years ahead. Memories are sometimes short and dealers should not forget that the more competitive the retail automobile business becomes, the more we have need of a common meeting ground to adjust problems.

I would like to encourage all your readers to write a letter to the editor any time he has a problem on his mind. Not only will he most likely find the solution but other readers will benefit by the problem itself.

Brack Wilson,
Pres. and manager,
B. and R. Wilson, Inc.,
Smithfield, N. C.,
(President, North Carolina
Automobile Dealers Association)

Protect your car ROUND-THE-CLOCK with **PYROIL**

Every time you add Pyroil to your car, you're improving lubrication. No matter what kind of oil you use, Pyroil gives oil the added property of clinging to cylinder walls and piston rings, protecting these vital parts against exposure to condensation, and metal-to-metal friction. Pyroil prevents clogging due to gummy deposits. Pyroil prevents damaging dry starts — because that constant clinging film of oil is a round-the-clock protector whether your car is rolling along or parked for the night.

Ask your gas station attendant to "add Pyroil" — and add miles of carefree driving.

PYROIL FOR AIRCRAFT ENGINES

Use Aircraft Pyroil B for lubricating oil, Aircraft Pyroil A for gasoline.

GIVEN!

An attractive Pyroil metal savings bank—takes coins up to 50¢ pieces. MOTORISTS, it's yours for the asking—sent postage paid



PYROIL COMPANY

471 Main Street

La Crosse, Wisconsin

Canadian Distributors:
Central Purchasing
Agencies, Ltd.
Toronto, Ontario

Profit protection THE-YEAR 'ROUND with **PYROIL**

A preferred product that protects cars from winter's cold and summer's heat — a sure-fire 12 months of the year profit maker — that product is **PYROIL**! Dealers can make big extra profits every week of the year by simply asking their customers, "Should I add Pyroil?"

PYROIL A DEMAND PRODUCT

has been nationally advertised in leading publications continuously since 1932 — plus radio advertising in major markets.

Let a factory representative tell you the complete merchandising and promotion program.



Southern Representatives

Southeast
The MacPhail Company
322 E. 5th Street
Charlotte, North Carolina

Southwest

Hirsig-Frazier Company
807 Cotton Exchange Building
Dallas, Texas

WHAT A CHANGE!

Dear Bill:

Thought you would be interested in the attached pictures which show our old and new used-car lot. This modernization program is in line with the national program of Chevrolet Motor Division and our new lot, which occupies the same location as the old one, is complete in every respect—concrete surface, closing office in rear and is lighted by 25,000 watts.

We feel it is the most outstanding used-car lot in the Southeast and thought you would be interested in the pictures.

P. L. Abernethy,
City Chevrolet Co.,
Charlotte, N. C.

That's a real metamorphosis, Paul!
(See page 70.)

JAM-UP WRITING

Gentlemen:

The recent article by Technical Editor Lowery on the Vacuum Gauge was the best I have ever seen on the



"Husky is as Husky does"

- and HOUDAILLE*

HUSKYS

give HUSKY service
plus HUSKY profits!



● The Houdaille Husky lives up to its name. It has extra strength and extra stamina with larger and stronger working parts. That means a balanced shock absorber with low-pressure operation and extra thousands of miles of service.

Because Huskys offer longer life and added value for such a small premium in price, they are fast sellers to new car owners and old. For use on commercial and service fleets they have no equal.

Spring, the big season for shocks, is just ahead. Prepare now for bigger sales than ever before. Stock Houdailles and push the Husky. For the complete story, call your nearest distributor or write to the factory.



**THIS DISPLAY STAND
BUILDS EXTRA SALES**

It puts your Houdaille stock out front and under the nose of every customer. It's an attractive, permanent sales builder — one of the many profit aids which Houdaille offers you.

HOUDAILLE-HERSHEY CORPORATION

HOUE ENGINEERING DIVISION

BUFFALO 11, NEW YORK

America's Pioneer Builder of Hydraulic Shock Absorbers

** Say "Hoo-dye"*

subject. It was clearly written in such a manner that any mechanic could follow it step by step. The article in a preceding issue on Voltage Regulators was also an exceptionally fine one.

A. R. Sellers,
Sales Manager,
Auto Electric of Georgia, Inc.,
Atlanta, Ga.

Here's a Time Saver idea of mine enclosed.

I am employed by Farmers Implement Co. at Brownfield, Texas. I sure gets lots of useful information from SOUTHERN AUTOMOTIVE JOURNAL, as other mechanics do.

Ferrell A. Echols,
Box 1012,
Brownfield, Texas

MECHANICS GET THE DOPE

Gentlemen:

ATTRACTIVE DATES

Who "puts out" the most attractive calendars in the South? The

HE TRIES TWO

Claude Powell, Jr., the aggressive

mechanic who started from hardly a shoestring a generation ago to build up a big repair shop in Columbia, S. C., has distributed two completely different calendars. One of Powell's Garage & Wrecker Service calendars carries an attractive Indian Summer scene, while the other emphasizes safety—something in which Powell's fleet of trim wreckers is interested.

WATCHES TIME SAVERS

Gentlemen:

I am a constant reader of the SOUTHERN AUTOMOTIVE JOURNAL. From time to time I have used several of the Time Saver ideas which you feature in your magazine.

At this writing, however, I would like the opportunity to collect one of those \$5 awards which you give for suggestions published in your magazine.

Louis Miller,
c/o Roger Sullivan,
Inc.,
(Chrysler Plymouth),
1410-16 Bloomingdale
Rd.,
Baltimore, Md.

(Time Saver submitted to technical staff.)

TEN COPIES COMING UP

Gentlemen:

We would appreciate very much your sending us ten copies of the December, 1949, issue of SOUTHERN AUTOMOTIVE JOURNAL and billing us for same.

W. D. Fortney,
Sales Manager,
McKay Chevrolet Co.,
Columbia, Mo.

GETS BENEFITS TOO

Dear Sirs:

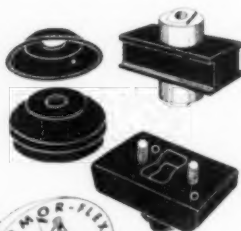
I have a few shop Time Savers I would like for you to consider for your automotive journal that might be helpful to some of the boys in the field. I get a great enjoyment out of reading them myself, some of

STANDARD PRACTICE IN BETTER GARAGES *Everywhere*



A MOTOR MOUNT CHECK-UP *with every* CLUTCH JOB

When a clutch repair job comes into the shop, most successful auto mechanics have a fool-proof check-up system. Frequently, the clutch checks out OK. So his next logical step is to check the motor mounts. He knows that soft, deteriorated or broken mountings prevent proper clutch linkage causing chatter. Chances are 10 to 1 that a new set of Armor-Flex Motor Mounts will solve the problem. And chances are this "standard practice" gained a friend because the mechanics did the job quickly — efficiently.



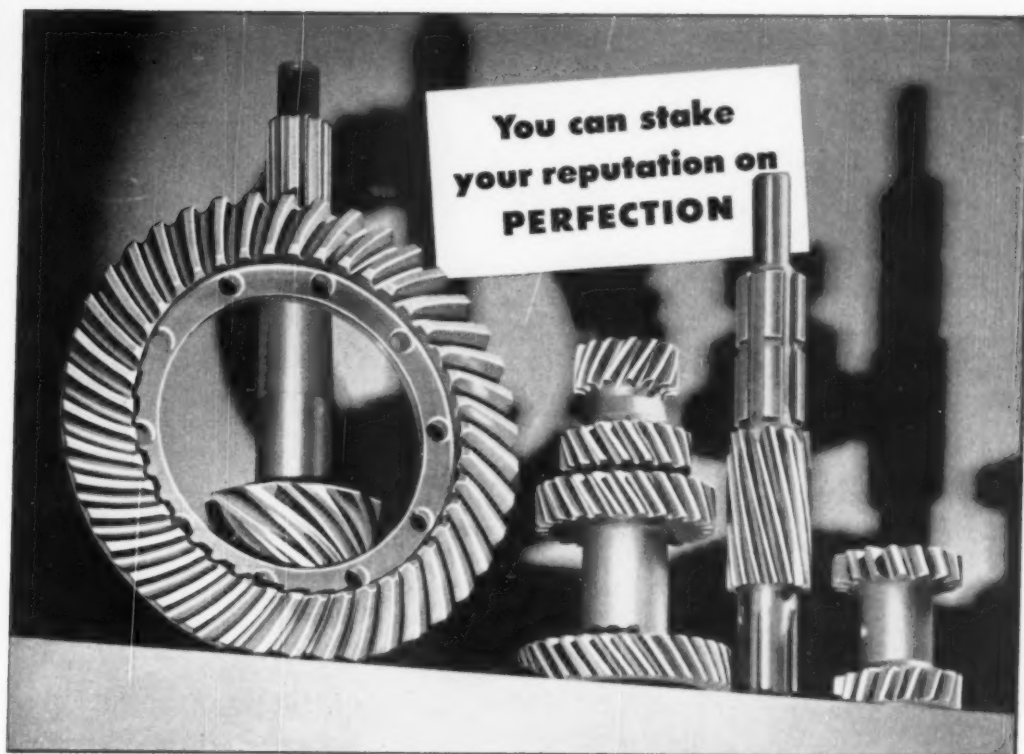
Play it safe

Install Armor-Flex live rubber mountings for your customers. Individually packaged. Original part number appears on every box.



Doan MANUFACTURING CORP.
1761 LONDON ROAD • CLEVELAND 12, OHIO

PACKAGED AUTOMOTIVE REPLACEMENT PARTS



PRECISION FIT

Speeds up your PROFITS!

Perfection Replacement Parts are precision made and carefully burished to "no tolerance" exactness to fit perfectly at every replacement job. They mesh perfectly . . . even with unworn parts that need not be replaced. You will find that you can turn out better jobs faster at greater profit with "pre-fitted" Perfection Parts.

PERFECTION RING GEARS and PINIONS are perfectly mated, lapped and packed in sets for absolute accuracy and efficiency in service. They provide long-lasting, smooth performance.

PERFECTION TRANSMISSION GEARS undergo continuous, close tolerance testing throughout every step of manufacture to assure the perfect fit and function that helps build your service reputation. They offer you greater profit and your customers greater service.

There is a Perfection wholesaler near you who carries a representative stock of these quality parts. He is prepared to render prompt, efficient, friendly service. If you do not know his name, write us.

PERFECTION GEAR COMPANY, HARVEY, ILL.

SOUTHERN AUTOMOTIVE JOURNAL for FEBRUARY, 1950



PERFECTION PRODUCTS INCLUDE:

Silent Timing Gears • Metal Timing Gears • Silent Timing Chains • Clutch Plates • Transmission Gears and Parts • Differential Ring Gears and Pinions • Differential Cases and Parts • Fly Wheel Gears • Cylinder Heads • Clutch Cover Assembly Parts • Pressure Plates • Clutch Forks and Parts • Clutch Rebuilders

which I have benefited from.
Ralph McKenzie,
c/o Downtown Motors
Co.,
405 East Washington,
Pittsburg, Kan.

"HELPFUL THINGS"

Thank you for your Time Savers department. I find lots of helpful things in it. I'd like to pass on some of my short cuts and ideas on doing a better job quickly. I hope I have

made them understandable.

Bill Marsh,
Ace Brake Service,
San Antonio, Texas.

Hope you get some of the \$5 bills that go out every month to a lot of different guys all over the South!

WANTED: A DIAGRAM

Gentlemen:

In a recent issue of SOUTHERN AUTOMOTIVE JOURNAL there was a wiring diagram shown for the 1949

Studebaker Champion. We are in need of a copy of this diagram but cannot locate the issue which contains it. It would be greatly appreciated if you would send to my attention one or two copies of this diagram.

Frank M. Connor,
Catalog Dept.
C. E. Niehoff & Co.
Chicago, Ill.

RECONDITIONING GOES OVER

Gentlemen:

On page 162-163 of your November issue you have an article headed "Prompt Reconditioning Is Key to Used-Car Success." At your earliest convenience will you kindly send us 25 copies of this article.

D. E. Holmes,
Fraser Products Co.,
Alpena, Mich.

Tells How!



You will find this 36-page Oakite Automotive Cleaning Manual a real help in streamlining all your daily clean-up work. Send for your copy today. Free!

With this 36-page reference guide you can modernize your shop for bigger profits on such jobs as:

- Reconditioning Radiators
- Parts Cleaning
- Steam-Cleaning
- Body-Washing
- De-scaling Blocks
- General cleaning of floors, grease pits, pumps, rest rooms

PACKED WITH PICTURES. The booklet is packed with pictures showing shop men in action steam cleaning; reconditioning clogged radiators; descaling blocks, stripping paint, etc. Booklet contains diagrams showing how to construct and install simple gas and steam heated tanks for mass production cleaning of small parts.

FREE This Guide is yours for the asking. Drop a line to address below for your copy. And remember! When you buy Oakite cleaners you get the personal services of your local Oakite Technical Service Representative to make sure you get the most for your cleaning dollar.

OAKITE PRODUCTS, INC., 52F Thames St., NEW YORK 6, N. Y.
Technical Service Representatives in Principal Cities of U. S. & Canada

OAKITE

SPECIALIZED INDUSTRIAL CLEANING
MATERIALS • METHODS • SERVICE

Ford Shows Human Side Of Modern Automobile

"The Human Bridge", a 16-mm sound film on the birth of an automobile, has been produced by the Ford Motor Co. to show how vast resources of mind and muscle are fused in a dramatic production enterprise.

The film is in full color and runs 28 minutes. Schools, clubs, churches and other organized groups may obtain the motion picture without charge, the only requirement being that the borrower pay postage for shipping.

Groups may obtain the film by contacting their nearest Ford or Lincoln Mercury dealer or by addressing the Ford Film Bureau, Ford Motor Co., 3000 Schaefer Road, Dearborn, Mich.

One of the special models put together by General Motors for its automobile show in the Waldorf-Astoria last month carried \$3,500 in leopard skin. Cadillac men, who presented the \$35,000 "El Rancho" car of last year, with Mexican hand-tooled silver fittings and natural cowhide trim, were not surprised that this one got even more attention. It's named "The Debutante."

Fisher Body in 1949 built more than 2,000,000 automobile bodies.



IT TAKES A HOT-FOOT WITH A GRIN!

One thing is certain: the Blue Streak contact in this breaker plate can take more punishment with less squawking than any other contact in the business. That's why it outlasts them all.

It has a contact area that is 55.4% larger than ordinary points—a special Blue Streak feature to reduce the heat of the arc-at-break. Instead of ordinary tungsten, the Blue Streak point is made of high amperage tungsten. Not only can it carry more current,

longer—it does so with hardly any burning or pitting.

The full length copper shunt cuts down resistance—allows the coil to deliver full power. The springs, the body—every part is precisely formed and, every piece is individually inspected to assure perfect fit.

Yes, you'll pay a few pennies more for this Blue Streak point but its quality assures longer life—it builds and insures your reputation.

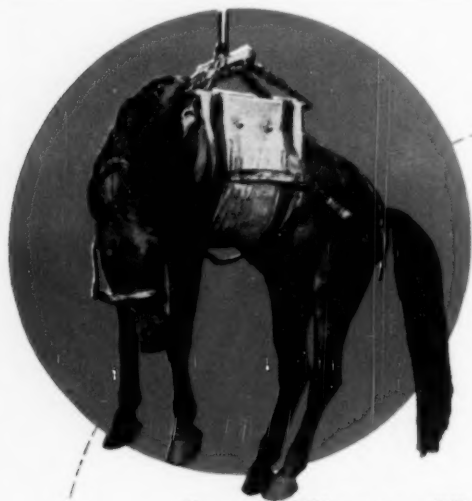
better your business...buy Blue Streak

STANDARD MOTOR PRODUCTS, INC., LONG ISLAND CITY 1, NEW YORK

Dear Bill,

We've about got the winter worn out, so we'll start planning on what we'll hit the customer with for the coming of spring. By sticking to our seasonal service programs down through the years, we have our old customers pretty well trained. They dutifully show up for the special, and know it keeps them out of trouble for the duration of the season. They used to ask for it during the war, when we didn't advertise it as we had before.

There are so many new automatic



Got A Minute, Mac

... a minute to talk about fan belts—*Thermoid* fan belts? With *Thermoid*, you don't need to tie up money in a lot of slow-moving numbers. *Thermoid* enables you to service all makes of cars with less inventory—gives you more money to invest in other fast-moving items. *Thermoid* makes one line of fan belts—the top quality line for cars, trucks and tractors—guaranteed to give long, faithful service. Why not get in touch with your *Thermoid* distributor, Mac, and learn how *Thermoid* can help you put your fan belt business on a more efficient and profitable basis. Or write:

Thermoid Company • Trenton, New Jersey



Thermoid

Brake Linings • Clutch Facings • Fan Belts
• Radiator Hose • Hydraulic Brake Parts
and Fluid • Car Mats • Thermoid Precision
Process Equipment.

transmissions on the market now, we've had to include the service of these units in the spring servicing operations. It's a good idea to change the fluid in them at this time of year, even if they haven't covered the full allowable mileage since the last change.

It simplified our problems a lot when the petroleum companies and the car manufacturers got together and approved a single fluid that can be used in the Ultramatic, Hydramatic and Dynaflo drives. We take care of all makes of cars, and it made it unhandy when one of the drives needed fluid and we were unable to get it.

It's reasonable for the factories to try to control the service on a new unit for a given time in order better to find the bugs, but when it goes on too long, the customer and the service men become impatient, and they go ahead and do things that are harmful, which they wouldn't do if properly instructed. I don't believe anyone is aching to tear into these automatic drives without training and special tools and equipment, but it's natural that they feel they should know how to add or change the fluid in them.

We know of several cases where customers far from their agencies had their fluid changed in the drive, and the boys hadn't been briefed on the job, so flushed the unit with engine oil. The engine oil couldn't drain out completely, so was left in where it could sludge and varnish up the parts like nobody's business.

Now they are able to buy the correct fluid for the job for either change or adding purposes, and have the dope on how to do the job.

They tell me some of the service men have been confused by the location of the transmission dipstick on the late series Buicks. It is so close to the engine dipstick they whip out the wrong one when checking the engine oil. On the '48's and early '49's the fluid level on Dynaflo was



Lovely Judy Tyler,
winner of Stardust's
National Beauty
Contest.

Beauty Sells Them!

THE SMOOTH, NEW
AERO-ALUMINUM



**CASCO
VISOR**

in beautiful Pearl Gray
HAMMERLOID ENAMEL FINISH

Count on Casco to spark up your visor sales with a gorgeous new baked enamel Pearl Gray Hammerloid Finish that sells on sight. (Can be re-painted to color-match any car if desired.) No other visor has so much to offer! You can count on Casco for tops in value . . . right down the line!

\$17.50

FAIR TRADED
LIST PRICE

LOWER INVENTORY!
FASTER TURNOVER!

**ONE MODEL
FITS 90%
OF ALL CARS!**

And

**THE FAMOUS
SALES-TESTED
SILVER-TONE**



EASILY ATTACHED!
A ONE-BAW JOB
NO DRILLING!

CASCO-VISOR
IN RIGIDIZED EMBOSSED ALUMINUM!

THE ANODIZED finish on this famous EMBOSSED ALUMINUM CASCO beauty is lustrous, scratch-proof, and corrosion proof. Perfect for quick sales to car owners who want a visor they can drive away with PLUS those who demand a color-match. You satisfy both types with *new* this one! Every Car Dealer, Auto Supply Store, Garage and Service Station can easily handle the Casco Visor profitably.

low price-\$17.50

FAIR TRADED
LIST PRICE



**SALES MAKING DISPLAY STAND
FREE** with Merchandise Order.
It's beautiful! It's sturdy!
Puts you in the profitable
visor business! **FREE** with
your order for 6 or more
Casco Visors.

FOR NEW AND UNUSUAL
AUTOMOBILE ACCESSORIES

CASCO

CASCO PRODUCTS CORPORATION
BRIDGEPORT 2, CONN.

Southeast Repr: LAWRENCE M. HIRSIG & CO.,
201 Hildebrandt Bldg., Jacksonville 2, Fla.

Southwest Repr: HIRSIG-FRAZIER COMPANY
Box 1140, 807 Cotton Exchange Bldg., Dallas, Texas

checked under the front floor mat like on the Hydra-Matic, but now it is under the hood, right-hand side.

You catch the dipstick on the Packard Ultramatic under the car and fluid can be added there at the same opening. If it's a change, however, there is another opening in the transmission reached through an opening in the front floor pan. That is easier to reach for pouring larger quantities.

We'll probably be learning about some different transmission as Stude and Chevy and some of the others move their jobs into the market.

When they add anything to the new cars, we play ball with them by adding its service to our spring inspection job. Nothing like being up-to-date and on the ball, now is there?

Yrs,
Ed.

Servicing Ford Regulator (Continued from page 90)

the ammeter used in previous tests is connected to the battery terminal of the regulator while the positive lead is attached to the negative lead of an

other test instrument, the positive lead of this other instrument being connected to the ground terminal of the battery. Thus we see that the generator current, after going through the regulator, passes through both ammeters to ground. It also passes through a carbon pile resistance in the heavy test unit which is the only reason for all this extra hook-up. By means of this resistance we are able to "load" the generator and check and adjust the regulator.

With our connections thus made, we increase the speed of the engine to approximately 1,500 R.P.M. The knob on the heavy test unit is turned in a clockwise direction until the voltage drops approximately 0.5 volt. The ammeter reading should increase, but not beyond the specified limits (Ford and Mercury, 34 to 38 amperes; Lincoln and some Ford trucks, 38 to 42 amperes). Bending the adjusting arm of the current limiter up will increase the amount of current allowed to pass; bending down will decrease it.

In connection with this unit of the regulator it is well to note that while the Ford and Mercury are the same, the 1949 Lincoln and some of the 1948's carry a larger generator capable of a higher maximum charging rate. These large generators are also found on some Ford trucks. They are readily recognized by their size, being more than an inch longer than the other type.

The wise mechanic will now make sure the cover is firmly in place and run quickly through these checks again just to make sure he has not slipped somewhere. Everything being okay, it can be safely assumed that the regulator will give another long period of service.

All this has taken quite a bit of time and paper to tell about, but in actual practice it's not difficult. The checks can be made in a very short time and seldom is it necessary to adjust all three units of a regulator. As was stated, we are servicing, not rebuilding them. Often a few minutes' time can be profitable as well as gaining a satisfied customer for your own shop.

Rock Hill Dealers Form Association

AUTOMOBILE dealers of Rock Hill, S. C., have formed an association with J. T. Neely, Jr., of Neely Motor Co., as president, T. W. Huey of Huey Chevrolet Co. is vice-president and Jack O'Neal of Rock Hill Motor Sales Co. is secretary-treasurer.

Directors include: Harvey Manors, Frank Sanders and E. B. Cox.

Here it is!

THE SENSATIONAL
NEW MODEL HT-20

SPONTANE
STEAM CLEANER

WITH EXCLUSIVE NEW
Hydro-Therm Flow
PATENTS PENDING
And Automatic Pressure Control

Faster
STEAM CLEANING

Easier
STEAM CLEANING

MORE
Economical
STEAM CLEANING

Pictured is America's most efficient steam cleaning machine. It's powerful. It's lightning fast. It is precision-built to give you years of top performance at low operating cost—with an absolute minimum of maintenance.

Big secret of Spontane's superiority is its exclusive "Hydro-Therm Flow" circulation system. Solution tank, all water lines and solution lines are kept hot. Troublesome crystallization of the compound solution at low temperatures has been entirely eliminated.

Pre-mixing of compound not required. Simply pour powder into Spontane's Pre-Heated Solution Tank with the Built-in Agitator and turn a valve. Easily removable panels and top hood provide instant accessibility. All operating controls on outside panels. Spontane's Triple-Cylinder Plunger Type Pump, more efficient "Aeroator" Jet Burner—plus scores of other advanced developments brings a new era of efficiency for every steam cleaning application. Consult your jobber for complete details, or write for free descriptive folder.

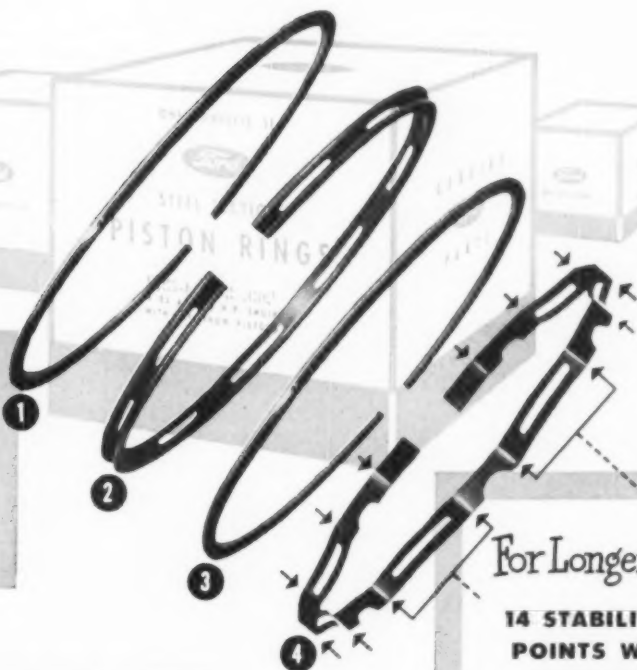
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Bring in **MORE** Business with Genuine Ford Piston Rings

OIL RING

1. Steel Section
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3. Steel Section
4. Inner Ring or Expander — a Ford exclusive!



For Longer Life

**14 STABILIZING
POINTS WHEN
INSTALLED!
A FORD EXCLUSIVE!**

GENUINE FORD STEEL SECTION PISTON RINGS

Exclusive... Patented... Made Right... Priced Right

Only cast iron ring section contacts cylinder wall under pressure during break-in period, eliminates scoring danger. After breaking in, steel ring sections absorb wearing forces. The inner ring has fourteen contact points which stabilize and control the ring and piston. Result—Genuine Ford Steel Section Piston Rings make for reduced piston vibration . . . longer piston and ring life . . . better oil control . . . more power and economy.

Genuine Ford Parts...
Right for FORDS!

Want more Ford service business? Always use Genuine Ford Parts—the ones Ford owners like best! Made right to fit right, last longer. Stock Genuine Ford Parts for more business—call your Ford Dealer or Ford Parts Distributor for quick delivery.



Independent Garages...

This sign of good business tells the town you stock Genuine Ford Parts—can bring in more business for you. Get in touch with your Ford Dealer or Ford Parts Distributor today . . . learn how you can qualify to use this business-building sign that's known and trusted from coast to coast.

FORD Division of FORD MOTOR COMPANY

Here's How to Test Fuel Gauge on Plymouth Cars

PLYMOUTH Division of Chrysler Corp. issued the following bulletin recently on how the electromagnetic fuel gauge works and how to test it:

The electromagnetic type fuel gauge on the current model P-17 and P-18 Plymouth cars consists of a dash unit and a tank unit.

The tank unit consists of a resistance with a sliding contact which is actuated by a float. This resistance is connected to the dash unit and varies the current in one of the dash-unit windings to give the meter indications. The tank unit case must be grounded to complete the circuit.

The dash unit has two magnetic

circuits, each of which has windings. One of these windings is connected to the starter-ignition switch and to the ground, and creates a steady magnetic pull towards "EMPTY" when the ignition switch is turned on. The other winding is also connected to the ignition switch, but is grounded through the tank unit. When the float in the tank unit moves towards the "FULL" position, a variable resistance is created, establishing a magnetic field which gradually overcomes the constant field and forces the needle to move towards the "FULL" mark.

With this type gauge, fuel level variations caused by going around corners or rough roads, cause the needle to instantly fluctuate. A radio static suppressor is not needed in this



**REDUCE YOUR
NUT-RUNNING TIME
as much as 90%
with
Ingersoll-Rand
ROTARY ELECTRIC
IMPACTOOLS**

Here's Proof of AMAZING Impactool Savings

Cylinder Head Repair

Removing cylinder head cap screws took only 3 minutes with the Impactool. The job required 27 minutes with hand wrenches.

Spring Service Job

Mechanics report 2 hours saved on servicing passenger car springs. Installing spring clip nuts took 16 minutes with hand wrenches—33 seconds with Impactool.

Oil Pan Removal

Impactool saves as much as 90% of the time on oil pan removal.

Wheel Changing

A service operator reports removing and replacing 4 passenger car wheels took 35 minutes using hand wrenches. With the Impactool he now does it in 8 minutes, without any of the former operator fatigue.

Stud Tapping

Hand tapping for studs formerly took 9 minutes of tough, fatiguing work. When the Impactool is used the job is done effortlessly in 2½ minutes.

The savings obtained by using the Impactool solely as a nut-runner more than justify its purchase. Be sure your shop is equipped with this modern labor saving, multi-purpose tool—encourage your mechanics to own their own tools by offering them a weekly repayment plan.

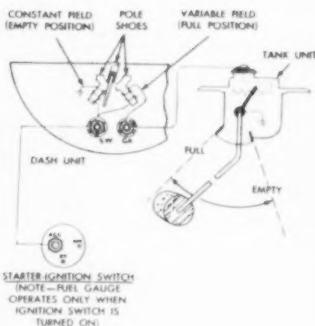
**Ask your jobber
for a free
demonstration**

Ingersoll-Rand

11 BROADWAY, NEW YORK 4, N. Y.

44-18

ORIGINATOR OF IMPACTOOLS—air and electric



gauge, since contact points have been eliminated.

Test wire from starter-ignition switch to dash unit—The ignition switch must be turned on as these various tests might indicate.

Connect a test lamp to the "SW" terminal on the dash unit and the other end to ground. If the lamp lights when the ignition switch is turned on, this circuit is good.

Test dash and tank units for ground—Both units must have a good ground to operate properly. Use a jumper wire to temporarily ground each unit at the case. If the gauge reading changes when the temporary ground is made, the case of the unit under test should be provided with a proper ground. The mounting screws of the dash unit should be cleaned and tightened. Clean the contacting surfaces of the tank unit and make sure the locking ring is tight.

Test the wire between the dash unit and the tank unit—Disconnect the wire at both ends. Connect a test lamp between the "AM" terminal of the starter-ignition switch and one end of the wire. If the lamp lights,

the wire is grounded and should be repaired.

If the lamp does not light, ground the opposite end of the wire. The lamp should now light; if it does not, the wire is broken and should be replaced.

Test the dash and tank units—If previous tests indicate that the dash unit is receiving current when the starter-ignition switch is turned on, that both the dash and tank units are properly grounded, and that the wire between these units is good, then test the dash and tank units as follows:

Disconnect the wire to the "GA" terminal. Connect a spare tank unit known to be in good condition to the "GA" terminal and ground the case of the spare tank unit with a jumper wire. Move the float of the spare tank unit up and down, and if the dash unit registers correctly, the tank unit in the car is faulty and should be replaced.

If the dash unit does not register when the float arm of the spare tank unit is moved up and down—the dash unit is faulty and should be replaced.

How to Test Tank Unit When Removed

1—Connect a jumper from a 6-volt battery to a Mazda "51" bulb.

2—Connect the ground side of the bulb to another jumper leading to the tank-unit terminal.

3—Connect another jumper from the tank-unit case to the other side of the battery.

4—With the float in the "FULL" position, the bulb should burn at almost full brilliance.

5—When the float is lowered, the light should steadily decrease in brightness until it will just barely glow in a reasonably dark room.

This test will show if the tank unit is operating properly, but will not indicate exact calibration. If the float wire or the float wire "stops" are improperly bent, they will affect calibration. If the contact wiper does not contact the wire cone resistor, the gauge will not function. In most cases of tank-unit failure, the unit should be replaced. When installing the gauge in the tank, be sure not to bend the float arm, be sure the gasket is sealed properly, and check for possible binding of the assembly.

Fewer Accounts Due

(Continued from page 83)

done, armed with the information the account had checks out marked "insufficient funds" and seemed to owe almost everybody. The customer told Kruse that he wanted to pay the bill but just didn't have the



This Series F-8 tractor with tandem rear axle semi-trailer is one of 175 models available in the Ford truck line announced last month.

money. Kruse agreed that it was a bad situation and suggested that the account give them enough merchandise off the shelves to take care of their account. The customer was glad to do this and the records show the merchandise was sold for slightly more than the amount due.

"No collection agency nor any system of form letters can do as much toward collecting our bills as we can," Kruse said. "When an account becomes past due we can immediately visualize the business, the prospects, the owner's personality and his habits because we are better acquainted with him than any collection agency could possibly be and in addition we know more about this kind of business. Almost any person will cooperate if properly approached and under such conditions a way to surmount the difficulty can always be found. When that occurs you collect what is owed and you keep your customer."

Studebaker Sends Maxwell To Memphis Region

JAMES H. Maxwell has been appointed field service representative for The Studebaker Corp. at the Memphis, Tenn. regional office.

D. Mason has been transferred from the Cincinnati region to St. Louis as field service representative. He replaces R. R. Downs, who has moved to Cleveland. N. A. Hughes, formerly in Chicago, is now representative at Dallas.

Columbians Name Officers

Robert T. Clarke, Jr., of Central Chevrolet Co. was recently elected president of the Columbia, S. C., Automotive Trades Association. H. L. Burton of Palmetto Farm Supply Co. is vice-president and T. P. Knox of Commercial Credit Corp. is secretary of the automotive group.

Ford '50 Trucks Offer New Transmission

A FOUR-SPEED synchro-silent transmission that eliminates double clutching is standard equipment on the 254-cubic-inch, 110-horsepower engine for Ford Motor Co.'s 1950 models. An extra-heavy-duty clutch is included.

The 1950 line offers more than 175 models, powered by four engines and available in a wide range of wheelbases.

The engines include: 226-cubic-inch, 95-horsepower, six-cylinder engine; 239-cubic-inch, 100-horsepower V-8; 337-cubic-inch, 145-horsepower V-8 and the 254-cubic-inch six-cylinder.

Rear brakes on the F-7 models are 15 inches by five inches. They have aluminum shoes, a double cylinder and self-energizing hydraulic actuation. Full air brakes of the two-shoe type are available for the F-8 Series. Rear brake size is 16½ inches by 5½.

A new heavy-duty three-speed synchro-silent transmission is optional for series F-1 through F-3.

The F-8 now has a single-speed rear axle as standard equipment with a two-speed axle optional. A hypoid single-speed rear axle is offered for F-6 Series and all models have the gyro-grip clutch, roll-action steering and quadax rear axles.

The F-7 and F-8 Series have a double-channel frame for adequate support of heavy loads.

Gross vehicle weight ratings for the 1950 line range from 4,700 pounds in the F-1 to 22,000 pounds in the F-8 straight truck and 39,000 pounds when used with tractor and trailer.

Approximately 5,500 automotive patents will be issued in the United States this year, a sixth of all patents granted, a recent AMA bulletin said.

Maximum Car Size Reached, GMC Styling Man Predicts

MAXIMUM width and length have been reached in most of America's automobiles, especially the larger and higher-priced cars, and the tendency is to reduce length at present by better space utilization, without compacting the interior.

That is the opinion given by Harley J. Earl, vice-president in charge of

the Styling Section of General Motors, in New York at the opening of the GM "Mid-Century Motorama," presented in the Waldorf-Astoria January 19 through 27.

Height of cars also has reached a limit, from the point of practical distances as to ground clearance and comfortable headroom, said Earl.

Continuing progress is being made in automobile design, however, he pointed out, citing particularly better visibility, better treatment of exterior and interior trim and advances in color and pigment uses.

"In general," said Earl, "we are successfully approaching a long-time goal of eliminating hazardous blind spots. Very favorable comment has been received concerning visibility on our present cars."

"The advances in color treatment have been marked in recent years, with development of many new paint pigments for better durability and greater luster retentions so far as car exteriors are concerned. Gains of the last few years provide a greater range of cloth patterns and consequently a resultant greater range in appearance possibilities."

Automotive designers are most conscious of the wants of women in present-day cars, Earl stated. He has a number of women designers and styling advisers in fabric and color work in his section at General Motors in Detroit, with the aim of attaining a satisfactory balance in style based on the desires of both men and women.

Earl regards car styling in automobiles as becoming more important year by year as a sales factor.

"It is a matter of record that poor styling or improperly-timed styling has proven financially disastrous to some automobile manufacturers," he said. "Appearance plays more of a part in determining car sales than most people realize."

There has been some criticism in the past of an excessive use of chrome on passenger cars. On this he said:

"We have determined that the proper distribution and the proper design of the chrome components are the important factors—not the quantity used. Chrome used properly also is an important factor in used-car sales."

Dynaflow Production Rises

Buick Motor Division produced four times as many Dynaflow transmissions in 1949 as in 1948, Ivan L. Wiles, general manager, reported last month. More than 70 per cent of all Buicks built in 1949 were equipped with the transmission.

Smith Heads Hellwig Sales

Paul H. Smith is now sales manager for Hellwig Products Co., Inc., Glendale, Calif. He has been connected with the spring stabilizer and overload spring firm almost since its inception four years ago.

another tough job
made easy with...



NEW
OTC
**TRUCK REAR
AXLE BEARING
NUT WRENCH**

ADJUSTABLE — LETS WHEEL DO THE WORK

Now for the first time adjustable wrenches to remove bearing lock nuts and adjust rear wheel bearings on full floating truck axles. Axle nut is tightened or loosened by turning truck wheel.

Sturdily built for long, tough service, each wrench adjusts to several sizes. Four wrenches fit all hex sizes from 2 to 4 1/2 in.

Wrench No.	Adjustable From
1202	2" to 2 3/8" Hex
1204	2 3/8" to 2 7/8" Hex
1206	3" to 3 1/2" Hex
1208	3 3/8" to 4 1/4" Hex

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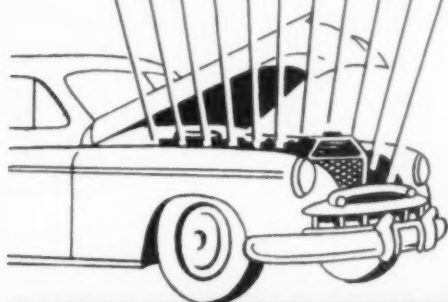
THE SIGN OF BETTER
TOOLS FOR EVERY JOB

Does 3 Important Jobs

1. Stops **CLICKING** Noise
2. Lubricates **VALVE** Mechanism
3. Protects Against Condensation



KEEPS CHEVROLET
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QUIET
AS A KITTEN!



EASY TO SELL...
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LIST PRICE
CHEV. \$2.75
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The new VAL-VIN-HED Silencer performs 3 important functions which makes it a **MUST** for anyone driving a Valve-in-Head Motor. **FIRST**, it **STOPS** valve clicking noise. **SECOND**, it provides constant overhead lubrication for the entire valve mechanism. **THIRD**, it provides protection against moisture condensation in valve cover. The gentle working of the rocker arms against the oil soaked filters of the Silencer provides an abundance of lubrication which reduces friction and wear thereby assuring a quieter, more efficient operation. Shops which are talking these features are installing dozens of VAL-VIN-HED Silencers. Order from your jobber **TODAY**. If he cannot supply you, write factory direct.

JOE L. ESTES CO., Winder, Ga.

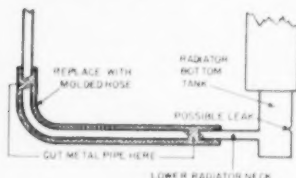


GOT A GOOD \$5 IDEA?

will be paid for every time-saver or shop short-cut accepted for publication in this section. A photo or rough sketch will make your idea more valuable. Only original items, not previously published, offered for our exclusive use, can be considered.

Avoiding Radiator Leaks On Kaiser-Frazer Cars

RADIATOR leaks at the bottom tank on Kaisers and Frazers are frequently caused by the lower hose and metal pipe being too rigid to allow the engine to move without breaking the bottom neck loose at the front



side of the bottom tank. At least that is where the radiator usually springs a leak. My remedy to overcome this is shown in the accompanying drawing—J. S. Tyson, service manager, Stockton-Bergstrom Motor Co. (Kaiser-Frazer), El Campo, Texas.

Installing Kingpin On School Bus

ON some late-model Dodge school bus chassis, mechanics may run into the same trouble I did when installing kingpin and bushings.

Remove both lock pins and also the steering arm before trying to knock out the kingpin because the steering arm also locks the pin.—Buster L. Robertson, Cragford, Alabama.

Time SAVERS



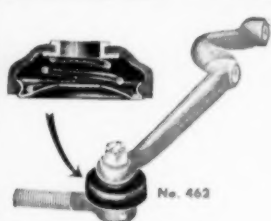
Correcting Loose Clutch And Brake Pedals

THE other day a customer brought in a 1948 Ford and demanded that something be done about the clutch and brake pedals, which were loose and scraping the floorboards.

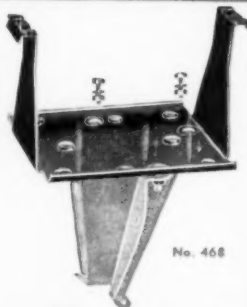
When the assembly was removed for rebushing, we found that the pedal shaft was so badly worn that it would have to be replaced. No nearby shops had the shaft, which is pressed into a casting, as a separate item.

We "miked" the worn shaft and then "miked" some old wormshafts that had been removed from steering assemblies. One recently removed from a 1934 Chevrolet was the exact size. We sawed out a section 1/4"

NEW SERVICE SPEED-UPS by CHAMP-ITEMS



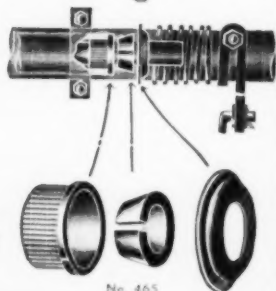
No. 462



No. 465



No. 404-K



No. 468

New parts that guarantee satisfaction. The kind of service that brings in more business and profits!

No. 462 STEERING LINKAGE KNUCKLE SILENCING CUSHION for all cars with conventional ball studs. Stops steering linkage noise and eliminates play at ball joint for more positive steering. List \$**.75** each.

No. 465 LOWER GEAR SHIFT SHAFT TAKE-UP BUSHING for 1940-48 Chevrolet cars and trucks. Eliminates rattle of shaft and provides for an easier and more positive shifting. List \$**.75** each.

No. 468 BATTERY SUPPORT TRAY for Chevrolet 1940-48. Sturdy heavy gauge steel construction. Easily installed — no holes to drill. List \$**1.50** each.

No. 404-K UNIVERSAL SPEEDOMETER CABLE REPAIR KIT for all cars and trucks. Repairs speedometer cable for any car or truck in 10 minutes! Each kit contains necessary tools, cable and collars to repair about 25 units. Approx. list \$**1.50** per cable. Refill kit No. 404-RK available.

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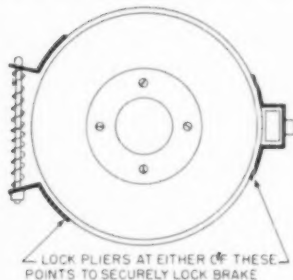
longer than the old shaft and drilled a cotter keyway $5/32$ " in diameter $3/16$ " from each end. After finishing the ends on a grinder, we pressed our home-made shaft into the casting.

In reassembling, we used the original washers and substituted cotter keys for the lock-ring retainers and thereby eliminated a nuisance for repairmen in the future.

We never throw away old shafts but keep them and tag them with their exact diameter. — Melvin J. Lumm, Route One, Berryville, Ark.

Removing Universal Joint On Chrysler Products

WHEN removing or installing universal joint bolts on Chrysler products, use your locking pliers to lock hand-brake drum. By locking the pliers on the edge of the drum



at the anchor or reinforced end, as shown in illustration, the brake will be locked effectively.

This saves crawling in and out under the car to set the hand brake. — J. W. Norman, Gutley Brothers, Cumberland, Maryland.

Stopping Fuel Leaks In Carburetors

ESPECIALLY during cold weather it seems almost impossible to stop all the little seeps at the plugs in bottom of the carburetor bowl. Expansion and contraction have a tendency to keep them leaking a small amount.

After overhauling a carburetor, I have found that a small amount of lacquer-type fingernail polish forms a perfect seal around the plug if it is applied after the plug is in and tightened. — Ralph McKenzie, Downtown Motors Company, Pittsburg, Kansas.

When Making Substitute For Carburetor Washer

ON THE carburetors used on the 1949 Ford trucks with the 145-horsepower engine, as well as the Lincolns and Mercurys, the retaining

washer for the pump rod felt is very easily misplaced. Sometimes another mechanic has assembled the carburetor without it. This washer is extremely important since without it the felt cannot be held in place to form a dust seal against outer air.

When the proper part cannot be obtained, a good substitute is the thin brass washer used under the cotter pin on very old Ford distributors. This is the model where both point arms are riveted to the same spring. — Lynn F. Snoddy, 1622 Vivian Street, Shreveport, Louisiana.

Solving a Motor-Oil Problem on Fords

IN THIS day of detergent and somewhat smelly motor oils, pre-1949 Fords present a winter driving problem. Here is a solution:

Remove the intake manifold and at a point approximately 2" in front of and 2" to the left of the forward point of the oil filler neck drill out and tap a hole to take a piece of $3/8$ " iron gas pipe. Drill through both layers of cast so that the pipe will open into the space provided for the

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Best
Under
Pressure"**



Thermoid Hydraulic Brake Fluid is compounded from the highest quality ingredients to meet or exceed SAE specifications. Thermoid Hydraulic Brake Fluid is fortified with corrosion inhibitors—will not harm rubber or metal parts—will not swell rubber cups—operates satisfactorily at temperatures from 60° below zero to 230° F., and mixes well with all recognized quality fluids, including those used by car manufacturers. Specify *Thermoid Hydraulic Brake Fluid*. It works best under pressure. Thermoid also makes a complete line of *Hydraulic Brake Parts*—made according to approved engineering specifications and fully tested.

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Brake Linings • Fan Belts • Radiator Hose
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Car Mats • Clutch Facings • Thermoid
Precision Process Equipment

valve assemblies. This compartment is opened into the crankcase and fumes rise into it and seek their exit through the oil filler cap.

Remove the oil-bath air cleaner and weld a piece of the same size gas pipe into a hole in the body side. Extend this pipe into the oil sump compartment of the filler but at least 2" above the oil level. Then connect the two pipes after reassembling the manifold and air cleaner with a piece of neoprene heater hose.

The air will draw the fumes into it before they reach the oil filler cap

and the fumes will be burned by the air instead of being inhaled by the driver. — Melvin J. Timm, Route One, Berryville, Arkansas.

Making Tool to Load Pistons and Cups

HERE is the way I make a tool for loading the pistons and cups and sliding them into the wheel cylinders on all late-model Chrysler products:

Take a Plymouth sector shaft bushing No. 866921 and sand the in-

side opening a little with fine sandpaper.—Morton Shor, Penn Brothers, Inc. (DeSoto-Plymouth), Baltimore, Maryland.

When Reconditioning Master Cylinders

HERE is the way I save time on brake jobs: When reconditioning or installing master cylinders, I fill the master cylinders with brake fluid before installing and bleed it out. Three or four strokes is sufficient.

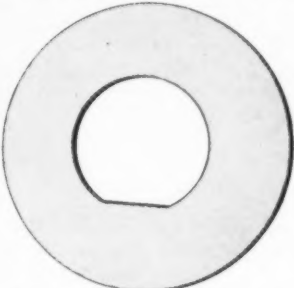
Then I screw a plug in the outlet to keep fluid in and dirt out while installing. Refill the master cylinder after bleeding. When installed, loosen master cylinder connection one-half turn. Reach up, catch brake pedal and pull down until fluid runs in a steady stream.

Tighten line and your bleeding job is done with time and a pint of brake fluid saved. This, of course, is on jobs where the lines are not already full of air but it helps on those jobs. —Al Henry, Floyd's Auto Sales & Service, Winfield, Kansas.

Eliminating Squeaky Brakes On Chrysler Products

TO ELIMINATE squeaky brakes on Chrysler-built cars, I insert a rubber washer on each brake anchor directly behind the brake shoe. In this way I have eliminated noises from the brake system.

The washer, shown in illustration, can be cut from an old inner tube.



I have made two cutters from this job, using an old wrist pin for the small hole and a piece of pipe for the outside diameter.—Louis Miller, Roger Sullivan, Inc. (Chrysler-Plymouth), Baltimore, Maryland.

When Grounding Tail Lights

SOMETIMES a tail light requires lots of work to ground it properly so both bulbs will burn at the same time. Rather than remove tail light

AUTOMATIC

Portable • Pneumatic

ONE-END LIFT

SOME MONEY-MAKING USES

- Car Washing
- Undercoating
- Relining Brakes
- Shock Absorber Work
- Packing Wheel Bearings
- Changing Mufflers and Tail Pipes
- Grinding Crankshafts
- Replacing Gas Tanks
- Frame Straightening
- Steam Cleaning
- Automobile Painting
- Rebushing Front Ends
- Under-Car Repairs
- Kingpin Work
- Tire Work
- Tightening Work
- Auxiliary Greasing

BODY AND FENDER WORK

The Automatic One-End Lift enables the operator to reach both sides of the work without crawling under the car. The usual back-breaking crouch is eliminated. The working height can be varied as the work progresses.

The Automatic One-End Lift is a sure money-maker for the great majority of car dealers, garages, paint shops and service stations. The labor time it saves pays for it over and over again. It is a splendid auxiliary greasing lift and is especially valuable for use in shops located above the ground floor, in locations where full sized lifts are impossible or difficult to install and where there is insufficient room to allow the permanent installation of a full sized lift. Write today for Bulletin 268-D.



Automatic One-End Lift in lowered position.

LOCKS STEEL ON STEEL

AT ANY OF SIX WORKING HEIGHTS

21" 27" 33" 39" 45" 50"



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CANTON 6, OHIO



Shouting "Value"
for all to hear...



New, Lower-Priced Hudson Pacemaker is the Dealer's Kind of a Good Deal!

You'll find there's a lot more to 1950 than just another new year.

You'll find a whole new market . . . new buying habits . . . new ideas about more value per dollar.

That's why the new Hudson Pacemaker is America's new sweet-heart. For here's the one completely new car in the field . . . offering BIG-CAR advantages at a competitive, lower price.

Better yet, the Pacemaker offers distinctive features and plus values not found in any other make at any price, high or low. Nowhere else does the buyer find "step-down" design, its lower center of gravity, its superb hug-the-road ride, its stability, and its un-

matched roominess. There's a completely new high-compression Pacemaker engine, too, that takes off like a comet yet has saving ways.

Above all, the buyer gets design that *really captures the eye*—the new Pacemaker has sleek, smooth style, without meaningless bulk.

Do **YOU** want to sell an automobile that is *right* for the 1950 market in every way, and that's going like a house afire *right now*? Then write, wire, or phone Mr. N. K. VanDerzee, Vice President in Charge of Sales, Hudson Motor Car Company, Detroit 14, Michigan. Hudson has a *good deal* for good dealers, and the facts prove it. Get them today.

40 YEARS OF ENGINEERING LEADERSHIP

A few of the more than 80 important advances pioneered by Hudson

- 1909 Fluid-Cushioned Clutch
- 1916 First Super-Six, high-compression engine with compensated inherently balanced crankshaft
- 1926 First steel bodies built on a production basis in own manufacturer's plant
- 1935 Gearshift control at steering wheel
- 1936 Patented Triple-Safe Brakes (hydraulic and reserve mechanical systems from same pedal, plus parking brake)
- 1948 Monobilt body-and-frame*, an all-welded unit with recessed floor and exclusive "step-down" design
- 1949 Super-matic Drive—no-shift driving, economical overdrive

Go Places with HUDSON . . . the Great Pioneer!

*Trade-mark and patents pending

New **HUDSON** for 1950

3 GREAT
HUDSON SERIES

ONLY CARS WITH STEP DOWN DESIGN



and brackets for cleaning. I keep a supply of small metal staples handy.

When trouble occurs between fender and bracket, I use one of these staples, letting one point drive against the fender and the other straddle the rubber gasket and drive against the bracket. A light bump with hammer and screwdriver point will cause the staple to press into the gasket where no one will notice it.

When the trouble occurs between bracket and tail light, I drill a small hole in the underside where possible and install metal screw so threads

will cut into both tail light and the bracket. — Glenn Williams, Woodlawn, Virginia.

Using Clutch Pilot Bearing Puller

SOMETIMES I have found it difficult to remove bushings from generator and starter commutator ends that do not have a knock-out plug.

I use a pilot bearing knocker by inserting it down in the bushing. Tighten it, grasp the end with one

hand and give it two or three knocks. I find it comes out easily.—Toby Hearman's Battery & Electric, Dallas, Texas.

Installing Needle Bearings In Chevrolet Counter Gear

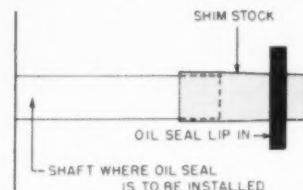
HERE IS AN EASY way to install needle bearings in the counter gear of the Chevrolet three speed transmission:

Use front kingpin of Chevrolet and taper ends slightly. Leave in and then push out with regular shaft after gear is put in the case.—Raymond J. Krueger, New Albany Motor Company, New Albany, Indiana.

Installing Oil Seal With the Lip In

HERE IS A procedure I use when installing seals when manufacturer specifies lip of seal in:

The shim stock is rolled first. The oil seal is slipped over the oiled shim



stock. Then the shim stock is slipped over shaft and the oil seal pushed on shaft.

You will never turn a lip of oil seal back if this procedure is used. It sure does the job.—Ferrell A. Echols, Farmers Implement Company, Brownfield, Texas.

Checking Fuel Gauge On Chrysler Cars

HERE IS AN EASY way to check inoperative fuel gauges on 1949 Chrysler products:

First disconnect lead from tank unit and clip momentarily to ground of car. Dash unit should read "full plus." To check wire, disconnect coupling under dash and ground lead to dash unit.—H. D. Zinn, 320 West Elm, Olathe, Kansas.

Jacking Up Front Ends With Coil Springs

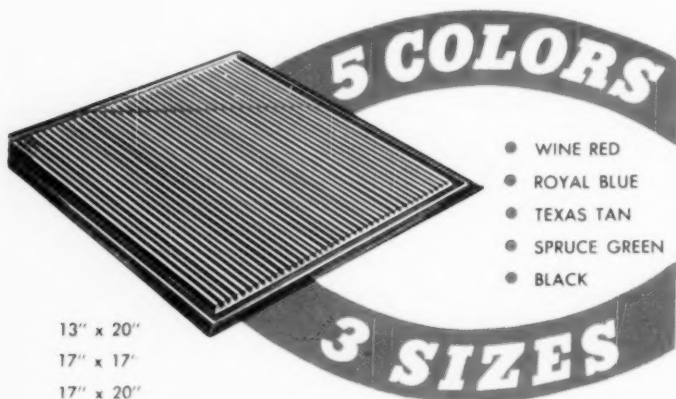
WHEN jacking up the front end of cars equipped with coil springs, it is hard to get the wheels clear.

To ease this problem, put a two-inch block between the cross member and the upper control arm. This will make the wheel come clear of

MONKEY GRIP

AUTO and UTILITY MATS

Monkey Grip "Feather Flex" Mats are volume and profit builders. That's because they are just what users want . . . bright attractive colors to match auto interiors; sized for perfect fit in most cars. Quality that lasts longer, and features that are most desirable. Distributors and dealers alike find Monkey Grip Auto Mats easy and profitable to sell. Write for catalog, sales literature.



Made by the makers of **BETTER MONKEY GRIP**
Tire and Tube Repair Materials

Catalog and sales literature of all Monkey Grip products are available. Write or wire today.

BETTER MONKEY GRIP CO.

PARTNERSHIP OF L. M. EVERETT & SONS
DALLAS • 5225 HARRY HINES BOULEVARD • TEXAS

IT'S SO EASY TO REBUILD CARBURETORS

with the revolutionary new

HYGRADE *Fingertip System*

AND THE PROFIT ON
ONLY 9 JOBS PAYS BACK
YOUR ENTIRE INVESTMENT



\$69.75 complete

Includes the priceless Hygrade Manual; assortment of 20 kits to repair all Chevy, Plymouth, Ford carburetors; all the tools and equipment you need; cabinet; a continuing bulletin service; metal signs, outdoor banner, etc. This outfit is easily worth \$100.00!

Thanks to the newly developed Hygrade Fingertip System, you can now operate your own carburetor rebuilding department and earn \$400 or more extra per year — with only one hour's work a week (1 carburetor job.)

HERE'S HOW THE HYGRADE SYSTEM MAKES YOU AN EXPERT REBUILDER IN ONE WEEK'S TIME:



NOT JUST A NEW MANUAL, BUT A COMPLETELY NEW SYSTEM!

Shows you how to put your finger on the trouble spot in a matter of seconds. How to repair without disassembling more than you absolutely have to. These clear, step-by-step instructions, arranged in sequence of assembly, tie in with the large exploded-view drawings and photos. The location of parts on these pictures is so easy that parts practically fall into place by themselves.

ASSEMBLIES PACKED IN SEPARATE ENVELOPES

All the parts for each assembly are packed and labeled in separate envelopes to match the new system. You work right along with the manual — envelope by envelope. As you finish each assembly, you automatically use up all the parts in that particular envelope. You can't go wrong!

- By selling labor instead of buying it on the outside, your profit on the average \$10.50 rebuilding job is eight dollars.
- At this rate, you make back your entire investment from the profit on only nine rebuilt carburetors — and you still have all the tools and equipment, the manual, and more than half the kit!
- You can turn every minute of your spare time into cash. In fact, in the time it usually takes for the round trip to pick up an exchange carburetor, you can rebuild it yourself.
- You insure your reputation, by making sure your customer's carburetor has been completely rebuilt with brand new parts.

ATTENTION: MECHANICS WHO ARE ALREADY REBUILDING CARBURETORS:

Did you know that you can rebuild a carburetor in 25% less time by using the new Hygrade Fingertip System? Clip the coupon; We'll tell you how.

RUSH COUPON TO:

"HYGRADE" 35-37 Thirty-fifth Street
Long Island City 1, N. Y.

By the makers of
Blue Streak Ignition Products



FREE! IMPORTANT BOOK!

Send for your copy of this valuable "better business" guide. Every single detail explained. Mail the coupon on a penny post card today. It's a 1c investment that can pay you thousands of dollars in dividends.

HYGRADE PRODUCTS DIVISION, STANDARD MOTOR PRODUCTS, INC.
35-37 Thirty-fifth Street Long Island City 1, New York

GENTLEMEN: Rush me your Free booklet, without obligation.

FIRM NAME

MY NAME

ADDRESS

CITY

ZONE

STATE

MY JOBBER IS

PASTE ON PENNY POST CARD

the floor sooner.—Buster L. Robertson, Cragford, Alabama.

When Overhauling Starter With Good Brushes

WHEN overhauling starters, I have found in several cases the brushes were good for a lot of service except for roughness due to a rough commutator.

After turning down the armature, I use a fine half round file, one inch wide, to file the brushes with the groove so they will seat properly.

Then I finish them with fine sandpaper.—Woodrow J. Cunningham, P. O. Box 327, Marshall, Missouri.

Replacing Light Switch On the '49 Plymouth

BEING unable to obtain a back-up light switch for 1949 Plymouth and Chrysler, I used a transmission interrupter switch which fits in the plug hole on the reverse rail situated on the left side of the transmission. It worked perfectly.

Use two 14-millimeter spark-plug

gaskets as spacers between the switch and housing to give proper spacing. When transmission is shifted in reverse, the rail closes switch.

This interrupter switch is the one used on 1946-48 Chrysler transmissions to break current for down shift and is obtainable when sometimes back-up light switch is not.—Cecil R. Young, Box 289, Abbeville, South Carolina.

Making Timing Marks Show Up Plain

HERE is a timing mark trick which works well with the light we use—a power type which flashes a bluish-white light.

On old, dull or hard-to-see marks I scratch on or near the mark with an ice pick or other sharp instrument rather than painting a mark. Be sure to get down to the new metal. When the engine is started and the light flashes, the scratches show up like neon lights.—Lynn F. Snoddy, 1622 Vivian Street, Shreveport, Louisiana.

Reading Parts Numbers Without Difficulty

HERE is a Time Saver for parts men as well as mechanics:

Sometimes the names and numbers on parts are hard to read because the small letters or numbers are worn. I rub a piece of white chalk over the numbers and then rub the excess off with a cloth. They then show up plainly.—Thomas Busby Gatage, Lawrenceburg, Tennessee.

When Repairing Cables On Windshield Wiper

A BROKEN windshield wiper cable can be repaired easily provided it is not broken at a point which passes over a pulley. Just trim the ends evenly and place them in a piece of 1/8" copper tubing about one inch long.

Crimp the tubing to the cable with powerful gripping pliers and a permanent repair is made. This method can also be used for shortening a stretched cable.—R. D. Hudgens, Shreveport Battery Company, Shreveport, Louisiana.

Repairing Gas Pedal Shaft on Old Cars

HERE is a way I have found to repair gas pedal shaft trouble on older model Chevrolets and Buicks where a ball-and-socket joint is used to pivot the pedal:

Take an old push rod out of a



Gunk Hydro-Seal Truck and Bus cylinder head cleaning kit. Large enough to take nearly all standard assemblies. Makes purchase of cleaning tanks unnecessary for many shops.

A WORD OF CAUTION

If it doesn't bear the Genuine GUNK Nameplate, it may be a partly diluted imitation—and will not give you the Safety and Advantages of Genuine GUNK and should be flatly refused.

1. Quickly digests and removes carbon gum, paint, lead, makes possible accurate visual inspection and fitting of delicate metering mechanisms, jets and orifices.
2. Lasts more than one year . . . due to Hydro-Seal.
3. Automatic rinsing.
4. Works hot or cold.

Sold by better jobbers everywhere

WIDENING USE FOR LABOR SAVER

Cleans cylinder heads of carbon without scraping . . . cleans water side of cylinder heads of insulating algae, grease, sludge and scale—thus restoring original thermal efficiency built into engine by manufacturer.



CURTIS

AUTOMOTIVE

1/4 H.P. to 10 H.P.

AIR COMPRESSORS

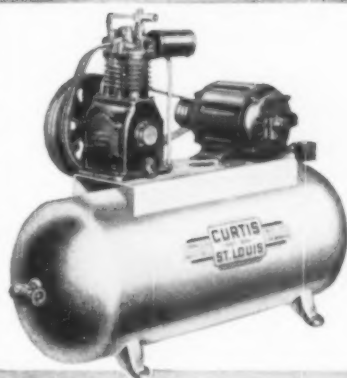
96 Years

of Successful Manufacturing

Curtis Air Compressors are available as either electric or gasoline driven (electric driven portable or stationary) — vertical or horizontal tank mounted.

Long the Industry's Favorite... Features:

- Timken-Bearing Equipped
- Self-Oiling
- Fully Enclosed Crankcase
- Finned Copper Intercooler
- High and Low Level Oil Gauge
- Fan Flywheel
- Positive Unloaded Starting
- A.S.M.E. Tank—Deep Penetrating Welds



CURTIS

Designed specifically to permit greater accessibility and thus increase the efficiency of the mechanic.

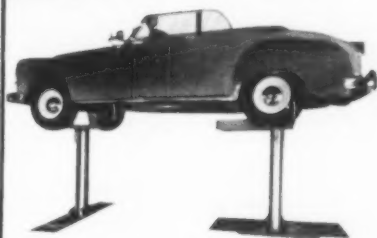
TWO-POST SHOP LIFT

FULL HYDRAULIC

More Profits Through Greater Shop Efficiency:

- Easy "spotting" of vehicles
Front end self-locating.
Wheelbase scale permits
presetting rear supports
- Minimum floor space required
- Rotatable rear carriage provides 60° wheelbase range
- Safe pickup—
"V" cut rear axle supports
Multiple "V"—notched front supports
- Maximum accessibility—room for tallest man to work with ease
- Minimum installation cost

Also Single-Post Lifts for Passenger Cars;
Single or Two-Post for Buses and Trucks.



CURTIS

A 300-pound stream of water can be transformed to a soft rinsing spray—merely by a twist of the nozzle.

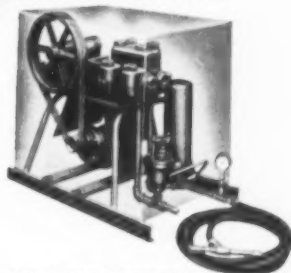
HYDRAULIC CAR WASHERS

Four sizes—1 to 3 H.P.

Do The Job Better... Faster

- Four sizes—1 to 3 h.p.
- One and two-gun models
- Timken-bearing equipped
- Self-oiling
- Precision made
- Designed by the pioneer car washer manufacturer—96 years of "Know How"

From a standpoint of SAFETY alone it will pay any driver to patronize the shop that uses a Curtis Hydraulic Car Washer.



CURTIS

PNEUMATIC MACHINERY DIVISION
of Curtis Manufacturing Company
1938 Kienlen Avenue • St. Louis 20, Mo.

CURTIS PNEUMATIC MACHINERY DIVISION of Curtis Manufacturing Company
1938 Kienlen Avenue, St. Louis 20, Missouri

A50-1

I am interested in items checked below:

- ☐ Air Compressors
- ☐ Auto Lifts
- ☐ Power Car Washers

Name.....

Firm.....

Street.....

City..... Zone..... State.....

Chevrolet or Buick. Grind the face on the bottom end to snap into hole in pedal. Measure the pedal and seat and bend to desired length and drill hole for cotter pin.

I have found this a very satisfactory repair.—R. S. Butdette, F & X Garage, Tokoma Park, Maryland.

Refinishing Panels On 1949 Models

WHEN refinishing panels on 1949 models, I have had considerable trouble removing all the greasy

material from the bare metal which would result in poor adhesion.

I use to clean them with synthetic and lacquer thinners, as well as steam cleaning and using wax and grease removers. Then as a final precaution I ground them with 80-grit sanding disc.

Now I use carbon tetrachloride very generously. By picking it up while it is still wet, I have eliminated the grinding and do not have to wonder if the prime coats will stick.

Carbon tetrachloride is also good to have around a paint shop as a fire

extinguisher and a fabric cleaner.—Charles D. Sneed, 4315 Woodland, Kansas City, Missouri.

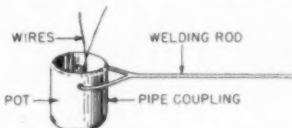
When Cleaning Corroded Battery Terminals

ABOUT six out of every ten cars which come into our shop have corroded battery terminals. To clean them, I put an ounce of sodium carbonate (washing soda) in a large-mouthed container with three gallons of water. Immerse the dirty and corroded terminals.

After five minutes the terminals should be clean. Wash them off with plain water. Now to keep clean, just coat with the lightest possible grease or oil. I have found this to be a good Time Saver.—Shadrach H. Boyer, Delaware City, Delaware.

Soldering Wire Ends For Sealed-Beams

I HAVE a Time Saver for soldering wire ends when installing sealed-beam lights and similar units which need soldering. I made a small pot out of a 3/4" pipe coupling. I welded a small plate on one end and spot



welded two small nuts on opposite sides. I made a handle of welding rod so the pot would swing.

Put acid on the wire ends and bend down. Lift the hot pot with solder up against them in a matter of seconds. There is no solder dripping on car fenders or other objects and it makes a neat job.—Raymond Calvert, Hill Top Auto Parts, Mount Washington, Kentucky.

Making Paint to Coat Wiring Harnesses

WHENEVER I have to make up a wiring harness for a burned-out job or install headlight relays when new harnesses are not available, I coat the outside of the sections covered with friction tape with a preparation made of half a bottle of gasket shellac and black lacquer paint.

I add the paint to the half bottle of shellac and use the dauber for a brush. This mixture dries fairly rapidly, makes the wiring look new and really protects the harness.—Morton Shor, Penn Brothers, Inc. (DeSoto-Plymouth), Baltimore, Maryland.



National PARTS CREATE MORE Repair Business for YOU!

- They Can Be Sold When A Major Repair Can't Be
- Can Be Installed Before Major Repairs Are Needed
- Fast, Easy Installations, You Can Handle More Jobs

You can multiply your PROFITS by installing National Parts & Assemblies, because they create more repair business. The unique features of National Parts prevent the need for major repairs. These low-cost, preventive repairs can be sold easily at the first sign of lubricant leakage, noise and vibration around the "U" joint, ball-housing and ball seat.

Because National Parts & Assemblies can be installed without tearing down the differential and because they save the cost of expensive replacement parts, major repairs can be sold when they might otherwise be put off indefinitely. Quicker repairs made possible by National Parts & Assemblies enable you to restore your customers' cars and trucks to their original, splendid operating condition at comparatively low cost.

DRIVE SHAFT BUSHING & SEAL ASSEMBLIES

Assembly drives over shaft flush with end of housing. New front bushing in assembly fits over the "U" joint. Sell with every transmission and "U" joint repair job.

- Provides Greater Bearing Surface
- Eliminates Oil Leaks from Transmission
- Prevents Dilution of Diff. Lubricant, Due to Trans. Oil Leaks
- Stops Excessive Vibration and Whipping in Drive Shaft caused by Loose Bearings
- Enables Repair to be made without Replacing Drive Shaft

Now 6 Different Bushings to Fit All Models. For all Chevrolet Cars and Pickups, 1930 to 1949; Pontiac Cars 1933 to 1936; GMC 1934-36 Pickups; and most GMC Pickups, Models 1939 to 1949.

Saves Buying a New Drive Shaft

Repairs Worn Drive Shaft and Seal

CAN BE INSTALLED IN ONE HOUR Without Tearing Down Differential



Pat. No. 2,403,520



DRIVE SHAFT HOUSING REPAIR UNIT K 400 Pat. No. 2,405,541

Saves Buying New Drive Shaft Housing. Repairs worn drive shaft housing. Prevents damage to drive shaft, "U" joint etc. caused by wear. Precision ground. For Chev. Cars & Pick-Ups, Most GMC Pick-Ups.

Sold Nationally by Leading Automotive Wholesalers. Write or wire for full information.



"UNIVERSAL" TRANSMISSION CASE BALL SEAT



UNIVERSAL JOINT BALL HOUSING KITS. Accurately machined, inside and out. Repairs Worn Drive Shaft Housing. Stops excessive wear & vibration between drive shaft housing, ball housing & trans. case. Most Chev. Cars & Trucks, 29-49. Most GMC Pick-Ups, Pont., '33-'36.

CLIP AND MAIL COUPON

Please Send Me Complete Information About the National Line.

Name:

Address:

City:

State:

5-2



NATIONAL MACHINE WORKS, INC.

P. O. BOX 4305

AUTOMOTIVE PARTS MANUFACTURERS

OKLAHOMA CITY 9, OKLA.



**Johns-Manville jobbers now have
the best there is for dealers**

✓ Products
✓ Promotion
✓ Profits

Results of nation-wide survey confirm new business-building features for dealers in expanded J-M Friction Materials line

This new, expanded brake lining program is the answer to a nation-wide survey conducted by Johns-Manville asking hundreds of jobbers what dealers require for 1950!

From this statement on dealers' preferences, Johns-Manville expanded its program to include: important improvements in brake and clutch products; new, attractive, sales-help literature; more local stations added to the largest radio program of any brake lining manufacturer... and many other important, new dealer promotion features.

Among the new items in the line are Wire-Klad, an improved brake lining development with an exclusive, revolutionary new wire reinforcement. Another is the finest looking, better-performing Spiral Wound Clutch Facing, designed especially to make clutch relining easier and more profitable.

It will pay you to write Johns-Manville today, or get in touch with your Johns-Manville distributor. Get the details of this new, bigger and better Johns-Manville friction materials program for 1950... Address Johns-Manville, Box 290, New York 16, N. Y.

"Bill Henry and the News"
Mutual Broadcasting System
8:55 P.M. E.S.T. Mon. thru Fri.



**NEW...
WireKlad linings and
Spiral Wound facings!**

These two important new products star in the expanded Johns-Manville line for 1950! WireKlad is the newest and most revolutionary development in brake lining manufacture and highly stable performance.

Spiral Wound Facings give drivers the amazing new "cushion" clutch action, plus the lowest rate of wear. They have excellent appearance, are easy and economical to install!

Johns-Manville

Asbestos

The FIRST name in asbestos brake linings

FRICION MATERIALS



Talk

No other Agreement can match the

DODGE • PLYMOUTH •

about **VALUE**

means talk about

DODGE

Perhaps YOU should
be a DODGE Dealer!

Dodge **TRIPLE PROFIT** Opportunity...

For full information write E. C. Quinn, General Sales Manager,
Dodge Division of Chrysler Corporation, 7900 Jos. Campau, Detroit 11, Michigan

DODGE “Job-Rated” TRUCKS

Steam Cleaning

(Continued from page 73)

a profit and not spend too much of it cleaning up the rack afterward, it is best to have a special rack for this purpose.

"The cleaner can also be used anywhere around the shop to clean floors, grease racks, benches or tools. It doesn't form rust because the metal stays hot 'til it dries and every last drop of moisture evaporates.

"The cleaner is on wheels and can be moved where needed on concrete floors, though a long hose reduces the need for this. Since it weighs around 800 pounds, we find it handiest to leave it outside, behind the shop, and take the work to it. In this way it doesn't interfere with any other work going on and also leaves all the grease and sludge outside, instead of messing up the floor. You can, of course, flush the goo down the drain. But we find that by keeping the unit outside we can save this cleaning up time several times a day.

"Although these cleaners have been on the market for several years, it's my opinion that only three to five per cent of southern shops use them. I'm sure that if the average owner knew how much he could save with one and how many extra profits he could make, they'd be steaming away in many more garages.

"For one thing, it's sure easier to keep good men in a shop where everything is clean and it's easier to turn out the kind of work that brings back the repeat business and the regular customer."

Langston is especially proud of the fact that he does the mechanical work for every business man in his block. These neighbors of Langston pass by the shop many times a week. The steam cleaner, which keeps both the shop and the repair work shining, is a big help in making sure each view of the shop they have makes a favorable impression.

Selling Our Service

(Continued from page 68)

gram is designed to reach the farmer. One day we stress new-unit demonstrations and sales, the next we stress parts and proper service.

We use road signs freely for service, placing them in the best possible locations.

We use direct-mail advertising more extensively than any other type. This is directed at prospective customers. Once a customer, he is reminded constantly by mail that we appreciate his doing business with our company.

Behind all our advertising is our public relations program. We strive to make everybody like us and to convince everyone that a stranger is a friend that we haven't met.

Our service department gets a generous slice of the advertising budget. Each service advertisement deals with one specialty item at a time—steering alignment, frame straightening, factory painting, rebuilding wrecks, motor tune-ups and similar items for the shop.

Maybe it all adds up to the reason why Hailey Motor Co. took over a

run-down dealership in 1935 that had failed four times and made it into an organization that continues to grow in an agricultural community centered around a little city of 6,000.

1949 was the greatest production and sales year so far in the history of Cadillac. In building 92,554 cars during the model year the division set a new all-time high record. As a fitting climax, the one millionth Cadillac was built on November 25, 1949—the last day of production of that model by General Motors Corp.

JOBBER'S OF THE SOUTHEAST:

On the opposite page is one of the many Arrow advertisements designed to:

1. Drive generator and starter business into your store if you stock Arrow.
2. To let your customers know dependability in generators and starters is available.
3. Advise that Arrow generators, starters and armatures are now available for immediate delivery.

1950 will be a big volume year for those jobbers who stock Arrow products.

ALL OF THIS WE CALL PROFITISING

The profit making features of this plan are explained in one easily read booklet entitled "PROFITISING WITH ARROW". Send for your copy today and start getting in on the extra sales and profits it brings.



GENERATORS
STARTERS **ARROW** ARMATURES
FIELD COILS
ARROW ARMATURES COMPANY, 15 FORDHAM RD., BOSTON 34, MASS.

Baby-Sitters Sell

(Continued from page 70)

lost a couple of sales trying to show cars to mothers with small children. The kids were crawling all over the seats, yelling and distracting the prospect and the salesman too. Nobody could sell a car under those conditions.

"And so I put the two things together and came up with baby-sitters."

At first, the only response Carr got was from women and girls wanting

jobs as baby-sitters. But as the idea was plugged on his spot radio programs it began to take hold. He got two or three requests a day for several weeks for baby-sitters.

Obviously, some were from parents who had no idea of buying a car, but just wanted an opportunity to get away from the children on a free ride. Others, however, were sincere, and Carr believes he can trace at least three sales to the plan, maybe others.

For baby-sitters he used his wife and the wife of a salesman, so the cost was practically nothing, since he

would have used the advertising space anyway with other copy. There were other reasons for his choice of baby-sitters, too.

"Frankly," he said, "I was afraid of the professional baby-sitters. I didn't know what trouble they might get me into with somebody else's children. Our ad emphasized 'experienced sitters' and both of ours have children of their own, so we knew we were on safe ground there."

That's all there was to it. A prospect would call, ask for a baby-sitter and a demonstration. The salesman and sitter would call at an appointed time. The parent would go off with the salesman, feeling at ease, and would have to put up a lot of resistance not to buy if he or she were really interested.

"Those we served seemed to be genuinely appreciative," Carr said, "and in most cases they were people who never would have got to our lot otherwise. Most of them lived in the suburbs away from easy transportation."

Another advantage of the idea was to interest women.

"Get a woman to wanting a car, especially one with small children," Carr said, "and the sale is half made to her husband. I'd say that is one of the biggest talking points for the baby-sitting plan."

"But most of all, it created conversation. It was amusing to some, but it was a real needed service to others. It worked for me and I believe it will work for other dealers."

"If it doesn't, there's not much lost."

Mechanics Sign Mail

(Continued from page 74)

confidential chats with someone in the shop, parts department or sales room often pay greater dividends than several days of investigation.

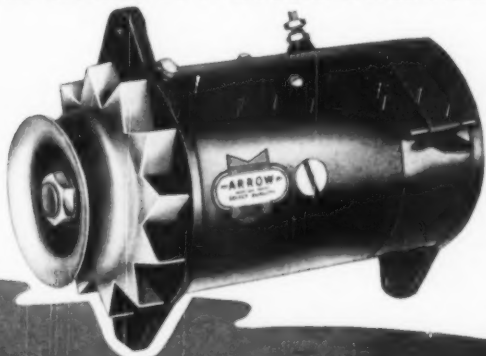
McGarity holds a departmental meeting for some segment of his organization every week. A general meeting of all employees is held monthly. A dinner, barbecue or fish fry is held for the entire personnel six times a year.

Employees of McGarity Motors are assured courteous treatment, good pay and excellent working conditions, but one of the most important points of all, McGarity believes, is the splendid introduction they receive when they arrive.

In 1910, Fisher obtained the first large order for closed bodies when Cadillac agreed to buy 150. In 1949, Fisher built more than 2,000,000.

YOU *Can* BUY A DEPENDABLE GENERATOR!!! *Dependability* IS WHAT YOU GET WHEN YOU BUY ARROW SELECT QUALITY GENERATORS *Because.....*

1. THEY ARE PRICED RIGHT.
2. THEY ARE TOP QUALITY.
3. THEY ARE ORIGINAL TYPE UNITS.
4. EACH GENERATOR CONTAINS A NEWLY REWOUND ARMATURE AND NEW FIELD COILS.
5. THEY ARE BACKED BY A LIBERAL GUARANTEE.



AND

ARROW'S PLANNED SALES PROGRAM INCLUDES COMPETITIVE PRICES AND PROVIDES SUBSTANTIAL PROFITS FOR YOU.

Always ask for Arrow Select Quality Generators. Should you have to accept a substitute send us your name and the name of your local distributor immediately. We'll arrange with him to keep a stock of these dependable Arrow Generators available to you at all times.

GENERATORS **ARROW** ARMATURES
STARTERS **ARROW** FIELD COILS
ARROW ARMATURES COMPANY, 15 FORDHAM RD., BOSTON 34, MASS.

Paying a Higher Rate

(Continued from page 69)

the more customary 50 per cent also substitutes for a yearly bonus. A bonus plan, Eley feels, is inadvisable in his shop for several reasons.

First, the employee must wait until the end of the year to receive his extra share of the profits, whereas he may need the money urgently during the intervening months to pay taxes, doctors' bills or other pressing debts. He may have to borrow from the bank to meet these obligations and when

the yearly bonus is finally received, he must turn it over to the bank or loan company without deriving as much pleasure from receiving it.

Second, the employee is apt to splurge his entire bonus when he receives it in a lump sum.

Third, bonuses mean considerable extra bookkeeping at a season when an overload of book work has been built up.

Pay checks are passed out every Tuesday. Eley adopted this plan several years ago, he said, because a few employees were inclined to throw

away their earnings over the week-end or to enjoy themselves too well and show up on Monday rather the worse for wear. Paying off on Tuesday evening has eliminated this problem almost completely.

Eley realizes that an occasional break in daily routine results in a more relaxed and efficient employee. That is why he has not objected when his employees spend an occasional afternoon on a shady lake when the urge for angling becomes too strong.

"No one has abused the privilege," he said, "and we're all fishermen." A row of slender poles usually can be found leaning against the shop wall during the spring and summer months.

Eley has never conducted a sales contest, yet all of his mechanics remain constantly on the alert for new business. Each man regularly solicits his friends, neighbors and relatives and keeps an eye peeled for new car-owners who move to town. A number of profitable jobs are sold every month by mechanics who contact car-owners after discovering additional needed repairs on the car they are servicing.

Boiled down, Eley said he had been able to obtain these advantages by paying his men 66 2/3 per cent of labor.

1.—He is able to skim off the cream of the local crop of mechanics.

2.—There is less likelihood that the mechanics will accuse him of "holding out" on them.

3.—Because they make a greater percentage on each job they do, the mechanics are less inclined to rush an assignment in order to handle more work and fatten the pay checks.

4.—The extra share of the labor charge acts as a stabilizer and provides mechanics with a modest nest-egg to tide them over dull periods.

"I don't believe there's a man on my payroll who would leave my employ," said Eley, who pays other members of his force above average salaries. "We're in this thing together and whenever any trouble arises, everyone comes forward to accept his share."

Some of the presses used by Motone Products Division of General Motors in the fabrication of small parts made from metal powder were originally designed to be used in making pills for medical purposes, later adapted for use in powder metallurgy.

A typical automobile manufacturer buys some 70,000 different kinds of items from 7,500 or more vendors, the AMA said recently.

8 OUT OF 10 CYLINDER HEADS are WARPED!

Partially ground — showing average warped condition

...warped enough that when pulled down tight, caused distortion to cylinder walls and valve seats.
(National Survey by Pitkin King Manufacturers)

with a SURFACE GRINDER

any man in your shop can do the job!

GRINDS

- Blocks
- Manifolds
- Clutch Plates
- Flat Flywheels
- Brake Shoes
- Pump Bases

VIBRA-MOTIVE ACTION
Revolutionizes Grinding
Special vibration motor mounting gives clearances, thus permitting a fast, accurate cut with level, 4 inch face stone.

TIP TOE WHEEL ADJUSTMENT

VIBRA-MOTIVE
PETERSON
SURFACE GRINDER
REVOLUTIONIZES GRINDING ACTION

AVERAGE HEAD GROUND IN 10 MINUTES

You Can Make \$18 per Hour!

The average shop will pay for the Peterson grinder in a few months from work it would normally send out. Using the Peterson Straight Edge Merchandising Plan, surrounding garages will supply enough work to make this grinder a real money maker. Not only do we claim this... we guarantee it!

PETERSON

Money Making Guarantee

Use our tested merchandising plan for 30 days. If you do not make money, return the grinder. We will pay the freight both ways.

CHECK THESE FEATURES:

- ✓ No set-up needed
- ✓ Any man in your shop can operate
- ✓ .001 inch accuracy obtained by light finish cut
- ✓ Exclusive "Cyclone Dust Collector"

For Full Information about the Peterson Grinder
as Jobber's Name in Your Territory, WRITE:



Peterson

WELDING LABORATORIES, Inc.
1423 Virginia Kansas City 5, Missouri

Cadillac Changes Carburetor

(Continued from page 27)

As a further means of restricting the undesirable effect of lateral motion, a wider rear spring shackle bearing has been designed. Relocation of the shock absorbers forward of the rear axle not only improves ride quality but also permits the use of five additional inches of space for the floor of the luggage compartment.

A new cross member positioned ahead of the rear axle adds to frame rigidity and acts as a mounting point for a new rubber bumper that absorbs any striking of the differential, company engineers said. Without this cross member, the striking force would be against the body floor.

Brakes have been redesigned to provide greater braking capacity with light pedal pressure. In proportioning the braking areas, drums have been reduced in diameter and increased in width. This is said to give improved cooling and to reduce brake-drum rubbing velocity, adding to the life of brake linings. A moisture-resistant lining is used.

The V-8 engine with a compression ratio of 7.5 to one is continued on the 1950 models with a number of improvements. Fuel pump valves are larger and compression ratio is increased for improved resistance to vapor lock and better fuel delivery to the carburetor. An all-metal fuel filter is used.

Valve and compression-ratio improvements in the vacuum pump provide greater vacuum for operation of the windshield wipers and aerial.

Improved carburetor calibration for greater fuel economy is made possible by moving spark plugs farther into the combustion chamber. This centers the spark-plug electrodes in the gas charge, allowing effective firing of a leaner mixture and improving the engine's idling stability.

Precision alignment of connecting rods and piston has been accomplished with a new machining method which bores both ends of the connecting rod in the same operation. A feature of the connecting rod-piston alignment is the elimination of an extra point of clearance by discarding the ordinary bushing and pressing the pin into the connecting rod.

Changes in the valve-gear mechanism provide a further reduction in noise level and assure greater wear resistance, company engineers said. Valve-guide lubrication has been improved.

A new rubber-mounted harmonic maintains closer crankshaft control.

NOW...a complete line of NEW FUEL PUMPS by



Turn Out Top
Notch Tune-Up
Jobs with Pee Dee

• With the new P. & D. fuel pump line you give customers all the advantages of the exclusive P. & D. NYLO-PRENE® diaphragm—an outstanding engineering advance that assures longer, more trouble-free fuel pump life than ever before possible.

The complete line of P. & D. fuel pumps gives you exact-dimensional, perfect-fitting replacements for all automobile, truck, bus, marine, airplane and industrial engines. Write today for catalogs and price sheets.

P&D

MANUFACTURING COMPANY, INC.

LONG ISLAND CITY 5, N. Y.

Reconditioning Profits

(Continued from page 66)

The Elkes workers were all attention. In the silence they could almost hear the oil dripping from the weary, disintegrating old car.

"But," continued Elkes, "as wonderful and far-reaching as this program is, we've still got to sell it to the public. We've still got to show them what it is. It is so good that words just don't describe it. We're going to do that with this old Pontiac you see right here."

It is nothing new for dealers and service establishments to paint half a car for a "before and after" demonstration of an enamel job, but this was the mere beginning of Elkes' idea.

"I want you to take this car," he said, "tape the right half of it in paper covering. Then run the left side through each of our departments. In that way we can show the public at a glance the services we offer."

The shop men started with the front bumper. The left half was replated and polished. The left side of the radiator was repaired. The left

half of the engine was steam-cleaned and painted. Inside, the left half of the dashboard was restored to its original grain. The left half of the windshield was replaced. Left windows were re-channeled and new glass put in. New floor mats and trim were put in the left half. The left half of the seats were upholstered and seat covers installed. Even the left half of the trunk interior was retrimmed.

Then body dents were worked out of the "good" side, the running board restored, left wheels tightened and aligned, and new tires added.

After all this, the left half was given an "Elkes-onized" baked enamel job. From bumper to bumper nothing was left undone on the restored half-car.

All the work was done on a spare-time basis, and its only cost was for material. Shop workers took delight in turning out their jobs. They had achieved a rolling demonstration of the service in their departments.

But the public presentation of the finished product still had to be dramatized to its full worth.

"\$250 for Suggestions"

Elkes was ready for that problem with a contest. "We have an unusual car that needs a clever name," said his direct mail and newspaper advertising. "\$250 for suggestions."

He urged the public to see the "half old half renewed" car and suggest names for the \$250 in merchandise certificate awards.

The car was driven through the streets with a sign advertising not only the company's services but also a budget plan to "give old cars a completely new look for only \$12.89 monthly, or less."

Hundreds of suggestions were submitted, and among them was one that was perfect. It was "Miracar." It easily won the top prize of \$100.

But what made it so unusual was the fact that it was submitted by M. Robert Barnett, then executive director of the Florida Council for the Blind, who himself is totally blind.

Barnett explained he arrived at his winning entry by "seeing" with his hands the contrast between the old and refinished parts of the car and listening to comments of others who could visually compare the colors and materials used.

The ability of a blind man to thus appraise the demonstration was practical proof of its effectiveness.

Other proof also has been shown since the naming contest, by rising sales charts. In the first 11 months of 1949, for example, the Elkes company filled 11,460 repair orders ex-

Be Thrifty in '50!

In addition to a product's price tag, find out how it performs, how well it is built. You'll quickly learn that every R & L product has the features and quality you want—at a thrifty price.

JEEPERS CREEPER

Outstanding value has made it America's most popular creeper. Tops in performance because only the Jeepers Creeper is equipped with the remarkable Ralco Roller.



Jeeper Seats



R & L Tooltoter



Jeeper Dolly

EVERYTHING ROLLS BETTER ON RALCO ROLLERS

Every piece of equipment will roll easier on Ralco Rollers. Sold in sets and specially designed for creepers, dollies, lubrication equipment, tool chests, etc. Inexpensive.



Write for catalog

R & L MANUFACTURING CO.
1945 N. 12th St. Toledo 1, Ohio

ceeding \$500,000 in parts and service. At the end of November its gross sales for the year were over \$1,000,000 for the first time for its 15 departments and 50 employees.

"We can trace a lot of that to the 'Miracar,'" Elkes said, "and our general promotion program built around the simple demonstration.

"That car is a real silent salesman. It visually represents all our departments. It's a picture story of the 'Elkes-onized' job, and it always draws attention wherever it goes."

And the cost?

"Nothing," said Elkes. "The car is paying us. In addition to its great promotion value, we use it every day in making our service customer contact calls. It does a marvelous selling job—all for free."

In all of Tampa it has become the familiar, practical symbol of Elkes-onized service.

Sensational Mr. Schmitz

(Continued from page 75)

T Ford. This car comes into the arena apparently driverless. After circling the hippodrome, the car stops in the center of the tent and 15 clowns emerge—small, medium and large ones. The climax is a clown six feet four inches tall who weighs 315 pounds. Finally Chauffeur Schmitz comes out.

"I get a kick from hobbling," Schmitz said, "but, mind you, my principal hobby is my business, which I never neglect. I would say that my secondary hobby is clowning in the circus. I like to see people amused and entertained but when I get out in the circus arena, I think I'm having as much fun pushing comedy as the audience has seeing it."

In addition to his hobby of clowning, Schmitz also collects automobiles manufactured before 1915 and has built a collection of telephone directories from all over the country. He calls himself "the biggest little automobile dealer in northern Texas."

None of the performers in the circus receives any compensation for his services. The performing activities are carried on through the years with the same enthusiasm and general cooperation as some towns give to the local baseball team.

The circus has presented more than 250 performances for scores of sponsoring organizations and as benefits for philanthropic enterprises. Any profits are put back into the corporation to make the circus a better show.

It's men like Dealer Frank E. Schmitz who make that possible.

to make YOUR work
EASIER, FASTER, BETTER

GENERAL GLASS RUN WINDOW CHANNEL



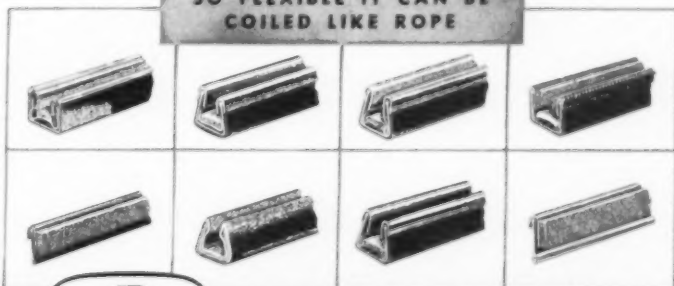
One way to cut customer's complaints about the high cost of repairs is to do a quality job in less than usual time.

General Glass Run Window Channel has the exclusive Connecto-Link reinforcement that prevents kinking, buckling or breaking...insures even

bending to any contour. You're never held up because the channel is kinked up. Every job turns out snug-fitting, rattle-proof and weather-proof.

Use General Glass Run Window Channel, Weather-strip and Division Bar Filler... for work that makes friends as well as money.

**SO FLEXIBLE IT CAN BE
COILED LIKE ROPE**



**THE
GENERAL
TIRE**

**THE GENERAL TIRE & RUBBER COMPANY
AKRON, OHIO**

900—Service Jack

The S-15 service jack with a $7\frac{1}{2}$ -ton capacity is now available from Blackhawk Manufacturing Co., Milwaukee 1, Wis.

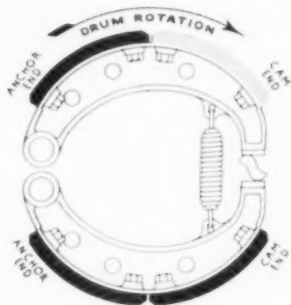
The unit handles all vehicles within legal axle load limits of nationwide tonnage laws, the manufacturer stated. It has one-piece malleable iron side plates for extra rigidity and a lift of $24\frac{1}{4}$ ". A three-position handle gives full stroke at any position. All controls are at top of handle.

901—Brake Block

A heavy-duty brake block, said to eliminate brake fade under all conditions, has been announced by World Bestos Corp.,



New Castle, Ind. It is designed for trucks, trailers and buses. The frictional characteristics of the



compound are so efficient that only one segment of Red Block, as it is called, need be used for each wheel, the manufacturer said. The remaining 75 percent of the wheel's braking surface is equipped with long-wearing blocks built from a special compound developed to work more efficiently with Red Block.

902—Slide Hammer

A slide hammer attachment for pulling the pinion-shaft oil seals on Chrysler-built automobiles has been placed on the market by Owatonna Tool Co., 306 N. Cedar St., Owatonna, Minn.

Designated No. 958, the attachment fits over the pinion shaft and threads into the seal. Since the pull is against the bottom threads of the tool, the seal is easily pulled, the manufacturer stated. It can be used on all models of Chrysler, Dodge, De Soto and Plymouth cars.



903—Spring Catalog

A catalog on its line of springs has been issued by Burton Auto Spring Corp., 2435 West 48th St., Chicago 32, Ill.



The Star-O-Load stabilizing overload spring is among the items featured.



PROFIT PACKAGE FOR 1950

Make more satisfied customers in 1950. Let Burd back up your installation know-how with the combination sets that guarantee oil control. In well-worn cylinders use Burd "Super Hi-Speed" Oil Rings. They provide a special wide-channel cast iron ring with exclusive ventilated expander to assure uniform contact over the entire cylinder wall... two steel segments installed *below* the cast ring for additional wiping action without excessive wear. Burd "Super Hi-Speeds" are available in combination sets for all makes and models. Get them from your Burd jobber... today!

BURD PISTON RING CO., ROCKFORD, ILLINOIS



904—Fluid Dispenser

The Whiz Auto-Flo brake fluid dispenser, said to fit any standard gallon can, has been introduced by R. M. Hollingshead Corp., 840 Cooper St., Camden 2, N. J.

To operate, a metal siphon tube is inserted in can and screwed tight. A rubber bulb attached to the tube is squeezed



several times to build up air pressure in the can, which causes brake fluid to flow through an 8' rubber hose to reach master cylinders. A shut-off clamp on the end of the hose controls flow of fluid.

905—Piston Ring Catalog

A Ramco piston ring catalog, containing 165 pages of specifications, has been issued by Ramsey Corp., 3695 Forest



Park Blvd., St. Louis 8, Mo. No. 94, as it is identified, lists a total of 8,337 piston ring applications, including 1,337 new applications.

906—Electrical Tape

Electrical tape No. 35 for motor work and other wiring jobs has been placed on the market by Minnesota Mining and Manufacturing Co., 900 Fargus St., St. Paul 6, Minn.

The tape is listed by Underwriters Laboratories, Inc., for temperatures up to 176° F. It has a dielectric strength of over 7,000 volts, the manufacturer stated, and adheres to plastic wires. Its plastic backing is said to give it both toughness and a rubberlike stretch of 125 per cent. Its thickness of 7 mils is said to reduce the size of the finished splice. In addition to automotive wiring jobs, the tape can be used for temporary repairs of heaters and radiator hose and rubber around doors and windows.

Please send me additional information on the following New Products described in the February, 1950, issue of SOUTHERN AUTOMOTIVE JOURNAL:

No. _____ No. _____ No. _____ No. _____ No. _____

Name (please print) _____

Company _____ Position _____

Number and Street _____

City _____ Postal Zone _____ State _____

Tear out and mail to SOUTHERN AUTOMOTIVE JOURNAL,
806 Peachtree St., N. E., Atlanta 5, Ga.

NEW...

GET THE GUM OUT!



Applying GUMOUT with Gummoter



GUMOUT, USED WITH THE GUMOUTER, SAVES HOURS ON EVERY CARBURETOR JOB!

Finish off motor tune-ups with GUMOUT—deliver the flashier results that only a thoroughly clean, well-adjusted carburetor permits! GUMOUT gets carburetors clean as a whistle without removal from engine, in 20 minutes flat! Only GUMOUT, with its amazing Q-Solvent, dissolves gum and cleans carburetors this revolutionary way. And with the GUMOUTER and just an end wrench, it's simple, sure and quick. GUMOUT is extra profitable, too! Makes you more money on labor, and you can also sell it profitably by the can, simply pouring it into the gas tank.

Big, impressive, colorful selling helps, too! Big banners! Big label buttons! Window streamers! See your GUMOUT jobber today, or write:

REFINED BY



PETROLEUM PRODUCTS SINCE 1860
PENNSYLVANIA REFINING COMPANY
GUMOUT DIVISION, Cleveland 4, Ohio

General Office: 1000 E. 12th St., Cleveland, Ohio
Phone: CO 1-1000 (10 lines)



GET IT FROM YOUR JOBBER!

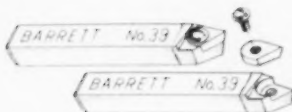
907—Cable Take-Up

An adjustable take-up for stretched brake cables, to be used where emergency brakes indicate too much slack, has been placed on the market by Supco Products Corp., Amityville, Long Island, N. Y. The take-ups are mounted on two-color display boards, 12 to a board.

908—Cutter

A brake drum lathe cutter with a replaceable carbide cutting tip to reduce tool cost has been announced by Barrett Equipment Co., 21st & Cass, St. Louis 6, Mo.

The replaceable tip cutters are engineered with exact clearance and rake



angle for use on all brake drums, whether steel or cast iron, the manufacturer stated. One cutter, twelve tips and two screws are included in a handy kit.

909—Terminals

Four numbers have been added to the Lynn "Lightning" solderless terminal line of Vaco Products Co., 315 E. Ontario, Chicago 11, Ill.

They include: No. 3203, a snap ter-

minial, for Ford, Mercury, Lincoln and other makes; No. 3105 connector for use with the snap terminal; No. 3202 terminal for General Motors cars and others, and its companion piece, No. 3104 connector.

910—Relining Unit

A complete unit for relining bonded brakes, containing a debonder, drill jig and multiple coverage brake lining set



No. BR5501D, has been announced by the Gatke Corp., 228 N. LaSalle St., Chicago 1, Ill.

The debonder will handle eight shoes at a time and pop off the liners in an average of six minutes, the manufacturer stated. Average drilling time for eight holes is ten minutes, the company said.

911—Spark Plug

A spark plug for marine and automotive engines, featuring a baffled firing chamber with five outlets, has been announced by the International Nickel Co., Inc., 67 Wall St., New York 5, N. Y.

912—Bumper Jack

The Tripod Saf-T-Lift, a bumper jack with a tripod base for added stability, has been placed on the market by Vulcan Manufacturing Co., Winona, Minn.

The unit may be used to raise either a single wheel or the entire back or front



end, the manufacturer stated, without the need to block wheels or take other precautionary measures to prevent rolling or tipping. The rust-resistant jack can be folded for easy storing.

NOW Voltage Output Adjusted
by EXTERNAL SCREW on the
NEW Shurhit Tru-Turn
VOLTAGE
REGULATOR

IT'S BRAND NEW!
OBSOLETE ALL OTHERS

It's a new time and labor-saving development exclusively by Shurhit . . . to allow quick precision adjustment without removing the regulator cover! A simple short turn of the external adjustment screw is all that is necessary to set the new Tru-Turn Regulator to exactly the proper voltage.

This great new feature is now offered exclusively on all Shurhit Regulators. Tru-Turn Regulators are completely guaranteed.

Shurhit
PRODUCTS, INC.

WILMINGTON, ILLINOIS

913—"Before-Charge" Tester

A "before-charge" battery tester which reportedly makes regular battery testing quick, convenient and portable for service stations has been announced by Willard



Storage Battery Co., Cleveland, O.

Called the Willard Checkmaster, it weighs only a pound and a half. It can be taken to the car for a quick, accurate check of the battery. To assure test accuracy, a top scale tells how many minutes the car lights should be switched on to remove surface charge. It's useful also for regular checking of batteries in stock, the manufacturer reported.

914—Ignition Kits

Two pocket-size kits containing a complete set of tools to do all types of ignition servicing quickly and accurately on



Auto-Lite, Delco and Ford distributors and voltage regulators have been announced KD Mfg. Co., Lancaster, Pa.

915—Lining Remover

A Hartman bonded brake-lining remover, said to be suitable for use with standard brake-drum lathes, has been announced by Automotive Division, Maine Machine Works, 1250 E. 109th St., Los Angeles 2, Calif.

A mandrel is available so the unit can be used with 12" or larger machine lathes, the manufacturer stated. The remover is made for shoes that fit 9", 10", 11" and 12" drums. Other sizes are available on special order.

916—Brake Catalog

The 1950 edition of its catalog on Wagner Lockheed brake parts, fluid and

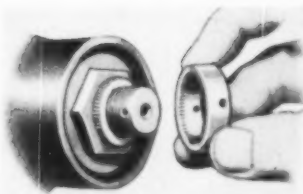
CoMAX brake lining has been issued by the Automotive Division of Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 14, Mo. Catalog AU-500, as it is identified, lists shoe-exchange sets and bonded lining segments among other numbers.

917—Front-Wheel Nut

The "Educated Nut," designed to give precision adjustment of front-wheel bearings on passenger cars, is now available from Bear Manufacturing Co., Rock Island, Ill. Manufacturer of the nut is Advance Service Co.

Consisting of two parts, the nut has 84 points of adjustment in both pieces, the manufacturer said. The nut section

permits adjustment to be made in the usual manner. The cap slips over the nut and is lined up with the cotter pin holes. It is kept in place by the cotter pin.



Flashing TURN SIGNALS

**PRICED WAY DOWN FOR
PROFITABLE SALES**

YANKEE 975

**4-LAMP FLUSH MOUNTING
TURN SIGNALS**

The 975 can be installed anywhere on front and rear of almost any car — new or old. Chrome flashing signals are small — only 2 1/2" in diameter — use standard 2 1/2" lenses. They mount flush even on slightly curved surfaces. Lamp unit completely sealed . . . protected against water seepage and dust by moulded rubber mounting pad. Rims recess into mounting pad, giving the smart appearance of standard equipment.

POSITIVE ACTION SWITCH WITH PILOT IS GUARANTEED FOR THE LIFE OF THE CAR . . . CANNOT BURN OUT.

FREE "LIVE ACTION" DISPLAY
(Except for mounted merchandise) with every stock order

YANKEE 772

**2-LAMP SET WITH
4-LAMP FLASHER SWITCH**

This set provides 2 lamp turn signals for rear of car. Lamps and switch same as those described at left.

**TO BE USED IN COMBINATION
WITH YANKEE FRONT END
CONVERSION ASSEMBLIES**

for changing parking lights into directional signals.
Sold as a set—Packaged as two individual units for minimum inventory investment.

Conversions available for all popular cars (1942-1950) include sockets, wiring and double filament bulbs.

*Talk "Yankee" with
your jobber today*

YANKEE METAL PRODUCTS CORP. • NORWALK, CONN.

918—Metal Rule

A push-pull rule for taking inside measurements has been announced by the Herbrand Division, Bingham Herbrand Corp., Fremont, Ohio.



The base of the rule case measures 2", which is added to the length shown on blade when measuring inside lengths. Concave blade of tempered steel is said to remain stiff at full 6' length. The vertical numbers are set in black on white enamel face for easy reading.

919—Polisher

The 7" Junior polisher, designed especially for intermittent service in small shops and garages, has been announced by The Van Dorn Electric Tool Co., Towson 4, Md.

The unit weighs 8 lbs. and has a side handle and a reversible auxiliary side handle. There is a spindle locking pin for quick changing of bonnets and pads. The



no-load speed is 2,000 r.p.m. The polisher operates in either A. C. or D. C. current.

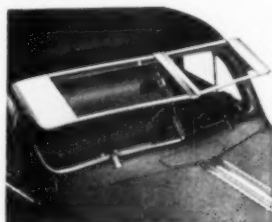
920—Spring Kits

Front-spring "build-up" kits for conventional and cab-over-engine models of Chevrolet and Ford 1½-ton trucks have been announced by Marcum Automotive Products, Inc., 1600 S. Ashland Ave., Chicago 8, Ill.

The kits consist of two insert leaves and longer rebound clips, center bolt and axle U-bolts for quick installation. Rear-spring kits are also available.

921—Sun Visor

Model A-10 visor, made of Lucite, is now being marketed by Visor-Visor Corp. of America, 831 S. Wabash, Chicago 5, Ill. It is available in green, blue



and red Lucite and fits most cars and trucks, the manufacturer stated. It has stainless steel framework with side brace keys which brace firmly to prevent rattle.

922—Shift-Knob Display

Display card No. 460-C for Chevrolet gear shift lever handle knobs is now available from Champ Items, Inc., 6191 Maple Ave., St. Louis 14, Mo.

Twelve of the polished aluminum knobs are mounted on the card. The handles have an over-all length of 4".



...noted for Endurance

Superiority is the result of a COMBINATION of features!

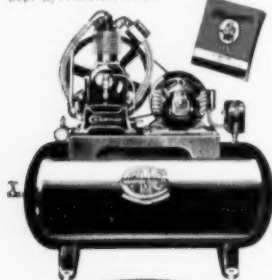
Endurance, performance and economy are determined by construction and design as a whole... not by any single feature! If you compare before you buy—you'll choose Champion every time! The materials, workmanship, and sound practical design of the Champion Line will convince you, as it has thousands of others, that the Champion can't be beat!

Order from Your Champion Jobber

FREE Champion Bulletin

Write TODAY for your copy—get all the facts—then compare!

CHAMPION PNEUMATIC MACHINERY CO.
Dept. K, Princeton, Illinois



Model
CE 40-60



Example 7-ball
level.
Extra deep, thin
rim for maximum
sealing.
Self-lubrication
—simple, efficient.
Fully enclosed
compressor keeps out
dirt and moisture.
Dynamically
balanced fan-type
flywheel.
Low speed, under
400 R.P.M., reduces
vibration.
Deep forged
connecting rods.
Enclosed centrifugal
unloader.

Champion's 21 EXTRA FEATURES
combine to give you longer life, better
performance and maximum economy

CHAMPION

AIR COMPRESSORS

923—Coil Spring

A line of heavy-duty coil springs and a line of extra-heavy springs for rear installations on Oldsmobiles and Buicks have been placed on the market by William & Harvey Rowland, Inc., Philadelphia 24, Pa.

The heavy-duty rear coil springs are designed to handle approximately 2000 lbs. overload, the manufacturer stated, and the extra-heavy springs are designed to handle approximately 500 lbs. overload per pair. The springs are centerless ground and individually pre-tested, as well as being shot-peened, a company announcement stated. They have a baked-enamel finish.



924—Engine Tester

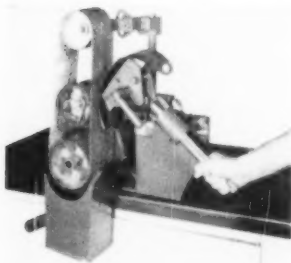
A King System engine tester with a built-in spark plug tester is now being produced by The Electric Heat Control Co., 9123 Inman Avenue, Cleveland 5, Ohio, it was announced last month by that company.

Designed for use on 6, 12 and 24-volt ignition systems, Model MT 830 operates from 50-60 cycle, 110-volt electrical outlets. All controls are readily accessible and placed adjacent to their respective meters for easy operation. The streamlined cabinet has storage space accessible through a full-length door in the front.



925—Brake Shoe Sander

Model BSU brake shoe sander, said to remove old bonded lining rapidly, true the shoe and leave a bright, clean surface with the correct degree of roughness to assure perfect bonding of the new lining.



has been announced by Lempro Products, Inc., Bedford, Ohio.

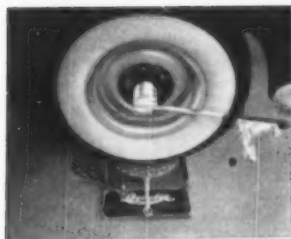
It handles shoes from 8" to 18" in diameter and up to 4" wide. A coarse 16-grit belt is used to remove the old lining, bonding cement, rust and grease. A 24-grit belt is then used to clean and smooth the bare shoe. The unit may be used for other sanding jobs.

926—Toe Gauge

A magnetic toe gauge for micrometer checking for toe-in and toe-out from the front of the wheels has been announced by J. H. Bender Equipment Co., South Gate, Calif.

Magnetic pointers snap onto the machined surface to the hub ends. The

bar is set in front of the wheels and remains in front. The readings are shown on the micrometer near the right front wheel. Calibrations are in 1/64".



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HELPFUL BOOKLETS FREE

101. WRITE FOR CURTIS LITERATURE ASSEMBLY KIT C-6—Gives full information on Curtis Air Compressor, Curtis Car Washers, and Curtis Auto Lifts. Curtis Pneumatic Machinery Division of Curtis Mfg. Co., 1938 Kielen Avenue, St. Louis 20, Mo.

104. FACTS ABOUT SPARK PLUGS AND ENGINES—To say that spark plugs are alike today, and that it doesn't make much difference which you buy is misleading fact. The purpose of this booklet is to give you facts—to show you how vitally important good spark plugs are to efficient operation. Champion Spark Plug Co., 300 Upton St., Toledo 1, Ohio.

109. AMMCO "SKILL-BUILT-IN" MOTOR RECONDITIONING TOOLS AND EQUIPMENT—Catalog pages showing famous AMMCO line of profitable motor service equipment. Amazing new ridge reamer, all-purpose small bore hone, cylinder surfacing hone, piston ring file, self-lubricating cylinder grinder, hydraulic brake cylinder hone and rod aligner, tension indicating wrenches, and line-boring machine for main and crankshaft bearings for all cars and trucks. Ammco Tools, Inc., 2104 Commonwealth Avenue, North Chicago, Ill.

111. AUTOMOTIVE MAINTENANCE TOOLS—New QTC Bulletin A-41 shows the easy, SAFE way to handle many automotive repair troubles—such as pulling bearings, bearing races, fan pulleys, axle shafts, pinion shafts, stub pinions, etc., without damage. Shows many new QTC Special Tools designed to make life more pleasant for mechanics. For a free copy, write to Owatonna Tool Company, 889 Cedar St., Owatonna, Minn.

115. NEW 1948 ISSUE of the popular brake parts and lining catalog, AT-500 contains specifications, data, prices, etc. This handy dealer's catalog, with ONE-POINT reference to fast moving brake parts and lining for an expert brake job, covers popular models of passenger cars and trucks. Wagner Electric Corporation, 6364 Plymouth Avenue, St. Louis 14, Missouri.

119. RAMMO SERVICE MANUAL—5th edition. Illustrated. Gives complete data on piston ring installation—also hints on locating engine trouble—causes of oil loss—pitfalls of motor-overhauling and how to overcome. Ramsay Corp., 3638 Forest Park Blvd., St. Louis 8, Mo.

122. INSTRUCTION BOOKS and technical data on the operation of Rear automotive wheel alignment frame straightening, wheel straightening, and wheel balancing equipment. Other books and pamphlets available on tire conservation methods and steering adjustments. Rear Manufacturing Company, Rock Island, Ill.

123. PERMATAX TOON-OYL is a scientifically developed product. It is a combination engine-carbon solvent, sludge preventer, and film pressure-resistant. Its use produces smooth engine operation and gives protection against the formation of acid chokes and film breakdown. Permatex Co., 1729 Avenue Y, Brooklyn, N. Y.

126. DELCO-REMY REGULATORS A 20-page 8 1/2 x 11 inch booklet covering the opera-

tion and maintenance of Delco-Remy regulators. (71 pictures.) Contains illustrations showing various steps of adjustment. Will help automotive electricians understand and service regulators. Delco-Remy Service Department, Anderson, Ind.

129. GORDON MUFFLER WALL CHART—Average wall chart giving suggested flat rate charge on replacing mufflers and pipes, and showing a listing of McQuod mufflers and pipes for popular cars and trucks. McQuod Corp., 2587 E. Grand Blvd., Detroit 11, Mich.

133. CATALOG NO. 580L—Featuring the 380 popular Champ-Items Reconditioning short cuts for all makes of cars. Champ-Items, Inc., 6190 Maple Ave., St. Louis 14, Mo.

141. THE FULL POWER STORY and Catalog of Mopar X-Plus Piston Rings for motor reconditioning. Mopar Piston Ring Co., St. Louis 14, Mo.

142. CATALOG NO. 45C—Automotive Cable Products by firm celebrating 25th anniversary manufacturing ignition and battery cables, wiring harness and other cable products. Andrews Mfg. Co., St. Louis 14, Mo.

144. AUTOMOTIVE SERVICEMEN'S HANDY HAND BOOK—A simplified reference book for the operation, checking, tune-up and repair of auto, truck, and tractor engines. Ford Piston Ring Company, Rockford, Ill.

149. DRIVE SHAFT RUSHING AND SEAL ASSEMBLY for all Chevrolet cars, pickups and most GMC pickups—pamphlet fully describing this unit, with cut-away illustrations showing construction. Manufactured by National Machine Works, P. O. Box 4305, Oklahoma City 9, Okla.

150. VAN NORMAN CONDENSED CATALOG—A complete and concise manual covering all heavy duty shop equipment for the jobber shop, the independent garage shop or the car dealer shop. Van Norman Company, Automotive and Aircraft Equipment Division Springfield 7, Mass.

161. WHIZ CATALOG NO. 47-C—Describes the complete line of Whiz Automotive Chemicals designed to make cars run better and look better. R. M. Hollingshead Corp., 810 Cooper St., Camden, New Jersey; Toronto, Canada.

164. AIRTEX FUEL PUMPS AND GASOLINE FILTER-DAMPER—New and Rebuilt Fuel Pumps, Combination Fuel and Vacuum Pumps, Repair Kits and Filter-Dampers. Catalog AX35. Airtex Automotive Division, Chevrolet Master Mfg. Co., Inc., Fairfield, Ill.

169. WILLARD SERVICE EQUIPMENT—Charging Equipment, Parts, Service Accessories, Service Tools, Testing Equipment. WILLARD STORAGE BATTERY COMPANY, 246 E. 141st Street, Cleveland 8, Ohio.

171. SUN SCIENTIFIC AUTOMOTIVE SERVICE EQUIPMENT—Containing thirty-six full colored pages with complete description and prices, history, policies, warranties and profit proving plan. Sun Electric Corp., 6323 N. Avondale Ave., Chicago 31, Ill.

185. SERVICE MANUAL FOR THE DOCTOR OF MOTORS—A comprehensive and

thorough reference book which puts special emphasis upon the diagnosis of excessive oil consumption and the proper procedure for piston ring installation. It includes special instructions to follow when working upon certain makes and models of cars, a listing and description of recommended ring tools, and an interesting, informative account of the development of the modern automotive piston ring. It is a non-technical explanation of a technical subject. Perfect Circle Co., Hagerstown, Ind.

186. BATTERY SERVICE MANUAL—Prepared by Association of American Battery Manufacturers as an authentic reference and guide for everyone interested in automotive storage batteries. It is complete in its coverage of the subject and so simply written and so profusely illustrated that service men and car owners will find it easily understandable. Distributed by Auto-Lite Battery Corporation, P. O. Box 931, Toledo, Ohio.

197. SPARK PLUGS—Specification wall chart for passenger cars to 1949, with pocket containing new revised "Plug-Check" indicator and data book to assist service men in diagnosing spark plug problems by comparison with plugs removed from cars in service. Electric Auto-Lite Company, Merchandise Division, Champlain & Chestnut Sts., Toledo 1, Ohio.

203. POROUS CHROME PISTON RINGS—A 4-page folder answering pertinent questions concerning Porous Chrome piston development in piston rings. Kopper Company, Inc., Piston Ring Division, P. O. Box 626 Baltimore 5, Maryland.

206. NEW SUPREME LINE OF ARO LUBRICATING EQUIPMENT—An 8-page folder showing and describing many unusual features of this ultra-modern line. The Aro Equipment Corporation, Bryan, Ohio.

218. P & D GENUINE IGNITION PARTS—Catalog No. 47. Over 90 pages fully describing the complete line of starting, lighting and ignition replacement parts and coils for automobiles, trucks and buses. P & D Mfg. Co., Inc., 1902 Stearns St., Long Island City, N. Y.

222. "WHAT PRICE QUALITY"—Read how ignition parts should be made and why. "WHAT PRICE QUALITY" tells the story of the making of quality ignition parts. Written in non-technical language. Stan-Whitten in non-technical language. Standard Motor Products, Inc., Long Island City 1, N. Y.

225. CONDENSED CATALOG 230—This catalog illustrates all K-D tools with a brief description of each. K-D Manufacturing Co., Lancaster, Pa.

231. STEAM CLEANING—A 12 page illustrated booklet describing the Oakite vapor steamcleaning unit, including data on construction, engineering specifications, models, available and job applications, all factually presented in concise form. Oakite Products, Inc., 1527 Thames St., New York 6, N. Y.

233. NEW 36 - PAGE BLACKHAWK WRENCH CATALOG NO. 247—Lists socket, hex-type and open end wrenches and sets, including new "Nugget" double-duty drive socket wrenches. Blackhawk Mfg. Co., Milwaukee, Wis.

235. UNITED STATES ELECTRICAL TOOLS—A complete catalog of 12 pages fully illustrated with photographs of portable bench and floor electric tools comprising drills, buffers, grinders, sanders, polishers, heat guns, hole saws, screw drivers, surfacers, grout sealers, grinders and sets, tappers, etc. United States Electrical Tool Co., 1650 Findlay, Cincinnati 14, Ohio.

238. CATALOG NUMBER 47G describes our complete line of generator and starter motors. Complete car specification data is included in this booklet for all passenger cars and popular trucks through 1947. Arrow Armatures Company, 15 Furtham Road, Boston 34, Massachusetts.

244. COIL SPRINGS—A listing of replacement coil springs for all car models up to 1946. See for catalog 4-P. William & Harry Roseland, Inc., Tacony & Lewis Streets, Philadelphia 24, Pa.

257. RUBBER PRODUCTS—A condensed catalog designed for parts reference work just released. It contains handy simplified

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identification and illustrations of foot mats, pedal pads, motor mounts, and rubber bushings. Anchor Rubber Products Co., 1224 Longdon Ave., Cleveland 12, Ohio.

259. BUELL PROFIT PLAN—A descriptive outline of a unique merchandising plan for Buell Air Hone that offers big profits for auto, truck and boat dealers. Buell Mfg. Co., 919 West 4th Place, Chicago 9, Illinois.

260. FACTS ABOUT IGNITION CONTACTS—This booklet tells how design, materials, fabrication methods and manufacturing precision affects the function of this vital electrical part. Many hints on the curing of ignition life are given. Write Ehlins Mfg. Co., 242 East St., New Haven 5, Conn.

262. OIL FILTER MERCHANDISER—Those Extra Dollars and how to get them in oil filter service sales. All the facts on new Wix sales tools. The Cabinet Merchandiser and Wix Director. Wix Accessories Corp., Gastonia, N. C.

263. HAND TOOL CATALOG NO. 557, 50 colorful pages of modern Hand Tools for all phases of automotive repair and maintenance, showing the right tool or tool set for practically every job. New Britain Machine Company, New Britain, Conn.

265. HOISTS—A page color folder showing 1 single unit models and dual post truck hoist. Sampson Mfg. Co., P. O. Box 882, 2617 Tulare St., Fresno, Calif.

267. AUTOMOTIVE BEARINGS—Catalog 18-CB, a 14 page listing of connecting rod, cam shafts and main bearings for cars, trucks and tractor engines. Johnson Bronze Co., New Castle, Pa.

276. WHAT YOU SHOULD KNOW ABOUT COOLING SYSTEMS—What you should do to help your customers—the inside story of engine cooling—cooling system trouble—what to do when engine overheat—how to sell cooling service—these topics fully covered in a four color 16 page booklet by Warner-Patterson Co., 20 S. Michigan Avenue, Chicago 5, Ill.

271. RADIATOR CORES—A 22-page book, No. 226, of replacement cores for passenger vehicles, buses, trucks, tractors, and industrial equipment. It contains specifications, prices, and dimension diagrams for ordering.

Lake Auto Radiator Mfg. Co., 5801 Euclid Ave., Cleveland 3, O.

274. BRAKE LINING BONDING—A 6-page bulletin compiled to satisfy the need for complete, up-to-date information on bonding of lining to brake shoes. Ashbush Mfg. Co., Dept. E. N., Huntington, Ind.

277. ELECTRICAL SWITCHES—The 1948 Cole Hersee line consists of automotive switches, truck and trailer connectors, accessories and miscellaneous automotive electrical equipment. Address Cole Hersee Company, 29 Old Colony Avenue, Boston 27, Mass.

279. LIQUID SOLDER USES FOR BODY REPAIR—An attractive, legat envelope-styled folder describing the uses of the body repair shop of the new KWIK METAL solder. Folder describes the fool-proof uses of the new metal filler that applies like putty and hardens almost immediately into metal. Armoured Materials Company, Magee Building, Pittsburgh, Pennsylvania.

283. MICHIGAN ENGINE BEARINGS CATALOG 4TH complete information on connecting rod bearings and crankshaft bearings. Tables list part numbers, dimensions and tolerances for all popular makes of cars and trucks. Detailed interchangeability tables also included. Detroit Aluminum & Brass Corp., 3625 Christopher St., Detroit 11, Michigan.

296. AUTOMOTIVE TOOL CATALOG showing illustration and descriptions of the full line of Stream Line Hammers, Dollies and Miscellaneous Tools. Stream Line Tools, Inc., Ginoever, N. C.

297. FREE SOLDER LITERATURE—A four page folder, "Some Properties of Soft Solder," offered gratis. Included are facts which will enable the reader to choose better the solder suited to his work at hand—melting point, data, tensile or joint strengths, sustained load values, etc. Write FEDERATED METALS DIVISION, American Smelting and Refining Company, 120 Broadway, New York 3, N. Y.

298. AIR IMPACT TOOLS—Full details and prices on these new air tools. Bulletin #13 for vacuums to 3/2". Bulletin 2096 for haws and such as Spring U-Bolts, tractor treads, etc. Chicago Pneumatic Tool Co., 6 East 44th Street, New York 17, N. Y.

300. THE RICHLITE MFG. CO. has available for distribution a colorful and fully illustrated 32 page catalog of exhaust deflection, rear view mirrors, inside door handles and many other quality automotive accessories and parts. Ritchie Mfg. Co., 2326 Indiana Avenue, Chicago 16, Illinois.

301. BONDING VS. RIVETING—Four page bulletin listing the advantages and disadvantages of bonding in comparison with riveting. Replacement Brake Lining, GATK CORPORATION, 225 North La Salle Street, Chicago 1, Illinois.

303. MICROFINISH CRANKSHAFT MACHINE OPERATION AND CONSTRUCTION COLOR FOLDER Developed by Storm-Vulcan, Inc. featuring the fast, efficient and new method of operation called microfinishing. Storm-Vulcan, Inc., 2394 Commerce Street, Dallas, Texas.

307. VAL-VIN-HED Attractive catalog sheet containing information about the new VAL-VIN-HED-SILENCER designed to perform these important functions in a motor with overhead valves and rocker arms. Reduces valve sticking noise, provides overhead lubrication and protects against moisture condensation. Joe L. Estes Co., Windsor, Ga.

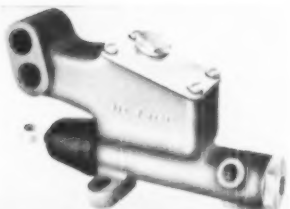
309. OIL FILTER & REFILL, RAPID REFERENCE CATALOG has easy-to-use Replacement Chart which alphabetically lists makes of cars and cross-indexes makes of filters for cars, trucks, buses and tractors. Illustrates and describes Champ Multi-Screen and Standard Refills, plus various promotional helps. Champion Laboratories, Inc., Catalog Dept., 122 Charles St., Meriden, Conn.

311—PARTS KIT FOR TRUCK ARMATURE LATHE AND UNDERCUTTER—Thoughtful fully describing and containing small parts most frequently ordered for servicing TRUCK LATHE equipment. Frank N. Wood Co., 314 W. Main St., Waukegan, Wis.

314 NEW 1950 ISSUE BRAKE PARTS CATALOG—A handy ONE-POINT reference for fast-moving brake parts and fitting, covering popular models of cars and trucks. Catalog also lists complete stock of shoe exchange sets, as well as C-Max bonded lining segments available to those interested in bonding lining in their own shops. Wagner Electric Corporation, 1490 Plymouth Avenue, St. Louis 14, Mo.

927—Cylinders

The line of master and wheel cylinder assemblies has been expanded to cover most vehicles and full coverage of popular models is now given. EIS Automotive



Corp., Middletown, Conn., announced. Cylinders are tested both during mass manufacture and after final assembly, a company announcement said.

928—Window-Lift Kit

The WL101 hose make-up kit for automatic window lifts is now available from The Weatherhead Co., 500 E. 1331st St., Cleveland 8, Ohio.

The kit contains an assortment of connections to make hoses to order and a generous supply of hose for servicing window lifts, folding top lifts and other hydraulic hose units.

929—Battery Catalog

A 24-page battery catalog, featuring its complete line of batteries for automobile.

buses, trucks, tractors, marine and diesel service. Thomas A. Edison, Inc., West Orange, N. J. Dealer helps, including testers and charts, are described and illustrated.

929A—Valve Refacer

A wet valve refacer, designated VR 100, has been placed on the market by Snap-on Tools Corp., Kenosha, Wis.

The refacer will handle all valves, in-



cluding the latest types, with stems from 1/4" to 1 1/16" and face diameters up to 4". The manufacturer stated. All valve angles from 0° to 90° can be ground, with "quickset" stops for 15, 20, 30, 44, 45 and 90 degrees. Special collets grip the valve stem in two places to assure accuracy. A rocker arm attachment is standard equipment.

929B—Frame-Contact Hoist

The F-27 Frame-Contact hoist, which lifts an automobile by its frame rather than by the axles, has been announced by Globe Hoist Co., Mermel Lane & Queen St., Philadelphia 18, Pa.

The hoist consists of two parallel frame contact supports, each of which is attach-



ed to a self-synchronized hydraulic power cylinder. The cylinders are 42" apart, one at each side of the car. There is no hubber or cross member so the mechanism has an unobstructed view lengthwise the vehicle. No spitting equipment or mechanism are required, the manufacturer stated. The hoist is said to handle every type of passenger car.

531—Hood Ornament

A swan hood ornament, featuring illuminated plastic wings, is now available from The Gem Manufacturing Co., 1930 S. State St., Chicago 16, Ill. It is easily



installed on all cars, the manufacturer stated, and it has a universal V-shaped, two-stud, one-piece mounting. It is available in red, green, amber and blue.

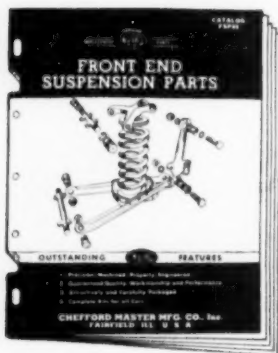
532—Cylinder-Head Studs

Cylinder-head studs which are threaded on both ends are now being produced by Blandell Manufacturing Co., 1404 Alamo Ave., Long Beach 13, Calif.

The lower end has a 1/2" standard thread and immediately above the thread the stud reduces in size to 7/16" and continues to the upper end with that diameter. The 1/2" U. S. S. thread reduces in depth at its upper end, causing the stud to tighten in the hole flush with the surface of the block, the manufacturer said. Four lengths are available for different car and truck models.

533—Front-End Catalog

A 16-page catalog which illustrates typical front-end assemblies for cars manufactured by General Motors, Chrysler, Ford, Hudson, Nash, Kaiser-Frazer, Studebaker, Packard and Willys has been

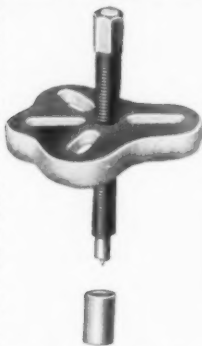


issued by Chefford Master Manufacturing Co., Inc., Fairfield, Ill. Directions for removing, replacing and adjusting suspension parts for popular cars are included. A numerical listing and an interchangeability chart are other features.

534—Steering Wheel Puller

A universal steering wheel puller, designed for use on all wheels tapped for cap screws, has been introduced by Owatonna Tool Co., 306 N. Cedar St., Owatonna, Minn.

No. 915, as the tool is identified, is designed for pulling wheels with either two or three cap screws. It is said to fit Chevrolet, Oldsmobile, Pontiac, Buick, Nash, Ford, Hudson and other makes of cars and trucks.



535—Body Solder

Super Solder for automotive bodies, said to retain its original pliability practically indefinitely, has been introduced by Associated Producers, Inc., Detroit 20, Mich.

It does not separate or skin over in the can, the manufacturer stated, and does



not skin over while being applied, shrink, peel, pin-hole or crack. It is said to adhere to materials used in body construction, including aluminum, stainless steel and monel metal. Quarts, pints and half-pints are available.

536—Dash Nut Sockets

Two sockets for use with dash nuts have been added to the line of Snap-on Tools Corp., Kenosha, Wis. They are designated S9469 and S9468.

The sockets are designed to remove and replace the retaining nuts that hold va-

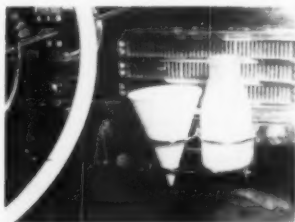


rious switches and controls on the instrument panel. Made especially for Chrysler-built cars, the sockets may be used on other cars and trucks using the same type of nut, the manufacturer reported.

537—Beverage Holder

A holder for cups, glasses and bottles which attaches to the dashboard of cars has been placed on the market by Warren Katz, 705 Durant Place, N. E., Atlanta, Ga.

The Car Bar, as it is called, may also be hooked over garnish mold on window



channels. When not in use, the holder swings back under dash. It is constructed of brass, chromium plated.

538—Fender Guide

An illuminated lucite fender guide, said to give greater visibility on width of car in the daytime and at night, has been placed on the market by Casco Products Corp., Bridgeport 2, Conn.

The streamlined chrome base houses a light bulb, the light from which travels up the translucent rod to the tip. The rod glows faintly all the way up to the tip, which is treated to concentrate and transmit a soft, glareless light, the manufacturer stated. The guide can be installed by drilling a 5/16" hole in fender. Angular adjustments for the rod provide upright position on varying fender contours.



539—Rear-View Mirror

The WylVue Multi-Scope rear view mirror, consisting of non-glare mirrors mounted in a special frame, is now available from Am-Ben Corp., 4140 Belmont Ave., Chicago 41, Ill.

The five sections of the mirror, mounted at angles, are said to give 160 degrees of unobstructed vision so driver can see



cars approaching in the rear on both right and left sides. The steel frame is attached to the garnish moulding with special clamps, eliminating the need for drilling. The mirror may be used on all passenger cars and station wagons, the manufacturer stated.

540—Brake Spring

A brake drum spring, said to eliminate screeching of brakes, has been added to the line of Perfect Parts, Inc., 55 Amsterdam Ave., New York, N. Y. The springs are furnished with clips to hold them in position, it was said.

News Briefs

(Continued from page 81)

Oldsmobile "Rocket" engine with some parts of clear plastic for better visibility was split in two to give visitors an inside picture of the unit.

Models of automatic transmissions with cutaway sections were another popular feature. Factory men were on hand to explain the different units and answer questions.

Displays were presented by Fisher Body, Chevrolet Truck, GMC Truck, Allison and AeroProducts Divisions, as well as the five passenger-car divisions. The new Allison T-40 turbo-prop aircraft engine, developed for the U. S. Navy, was shown publicly for the first time. AeroProducts' new contra-rotating propeller was also displayed.

The show used about 25,000 square feet of space in the Grand Ballroom and adjoining suites. Like the "Transportation Unlimited" show last year, which drew more than 500,000, the 1950 show was free to all visitors.

New Chevrolet Carburetor Has Concentric Bowl

A CARBURETOR with a concentric float bowl is being used on all 1950 Chevrolets except cab-over-engine models. The carburetor was developed by the Rochester Products Division of General Motors Corp.

Regardless of shifts in the fuel level due to road incline or sudden stops, the fuel level is always below the nozzle spill point, reducing fuel loss and minimizing the chance of stalling, Rochester engineers said.

This carburetor for 1950 Chevrolets features a concentric float bowl and a ball-type check valve built into the plunger head. It is available for replacement on earlier models.



Elimination of fuel percolation is claimed to result from the design of the main well support assembly, consisting of the passageway to the nozzle, the power valve and the main metering jet, which is surrounded and insulated by the cooler fuel in the float bowl.

A new pump plunger with a ball-type check valve built into the plunger head allows the hot vapors in the pump system to bypass the ball and circulate into the float bowl, instead of percolating into the engine.

A continuous fuel flow is said to

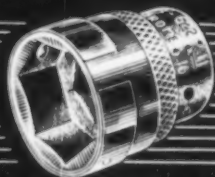
result from the use of a common passageway for both idle and main metering systems.

Servicing features of the carburetor include the elimination of metering adjustments, a permanent idle tube that is built into the unit and a fixed-type main metering jet to eliminate orifice wear. All main metering parts are in the cover, making it possible to service or inspect the float, the float valve assembly, the main well support assembly and the power valve assembly by the simple removal of the four cover screws.

NOW...
a socket that
GRIPS
and **HOLDS**



Herbrand's new
HOLD-IT socket



holds nuts, plugs, etc.
to prevent dropping and
losing in removing

Herbrand's new Tool-of-the-Month is the trick of the year for time and trouble saving removal of slippery nuts, plugs, etc. HOLD-IT Sockets are especially good for removing drain plugs on Hudson and Chrysler where plugs fall into the inaccessible lower pan. But they're handy on any job—when hands are greasy, when working in close quarters, etc.

HOLD-IT Sockets have two spring-tension pins in socket wall for firm grasp. Nuts remove easily from socket with hand pressure when free of job. You'll find HOLD-IT Sockets handy for many applications . . . for added safety and greater convenience.

See your Herbrand distributor, or write us for complete details.

JC-624 — 1/2", 6 pt. \$1.25 Fits Chrysler

JH-622 — 1/2", 6 pt. \$1.25 Fits Hudson

Herbrand

DIVISION OF

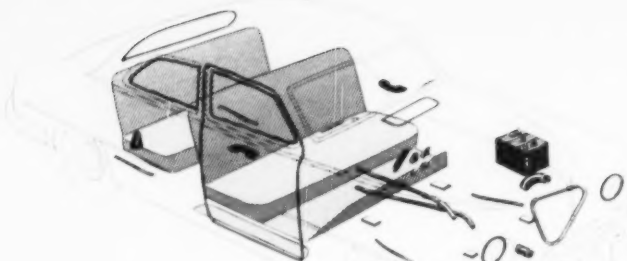
THE BINGHAM-HERBRAND CORPORATION, FREMONT 8, OHIO

*Trade Mark of the Herbrand Division. Patent applied for.



Herbrand makes a complete line of hand tools, kits and cabinets for all automotive service work.





Although the steel and chrome in a modern car are most prominent to a casual observer, there's a lot of rubber in one too, as this "phantom" view from The Goodyear Tire & Rubber Co. indicates. 1950 cars contain 94 to 143 pounds of rubber, according to a recent survey by Goodyear engineers, and use 350 to 400 rubber parts, exclusive of tires and tubes. In 1925 the average car used about three pounds of rubber, besides tires and tubes. But think of the difference in the ride, the Goodyear engineers pointed out!

Sharp Is Mayor Again

Erskine Sharp, president of the Tennessee Automotive Association, was recently reelected mayor of Pulaski, Tenn. He has been mayor of the city for the last ten years.

High Point Dealers Elect Lewis

Fleet Lewis is the new president of the High Point (N. C.) Automobile Dealers Association. Fred Mandlin was chosen vice-president and Clarence Coggins, secretary-treasurer.

Anderson Tells Story Of American Cars

Do you know that an advertisement for a self-propelled vehicle appeared in 1805? That in 1826 there was a description in a Massachusetts newspaper of a motor car that had the mobility of the present automobile, including interchangeable gears? That the Chicago World's Fair of 1893 had an automobile show?

These are just a few interesting facts in the development of the modern car brought out in "The Story of the American Automobile," to be published this month. R. E. Anderson, editor of NADA Magazine, is the author of the book.

When he started research for the book, it was not his plan to try to discover lost birth records of the automobile, Anderson said. They revealed themselves as he searched old newspapers and magazines for automotive lore.

In addition to reports of experiments with steam, electric and gasoline cars that were buried in the past, he found pictures and announcements to prove that Americans were considering the horseless carriage as far back as the Revolutionary War.

Evidence that the gasoline-motor vehicle was manufactured five years ahead of the date generally accepted is furnished by the reproduction of an ad in a national trade magazine of 1888 which has some of the earmarks of modern motor-car advertising, Anderson said. Another advertisement carries testimonials from users of a small gasoline engine that could be attached to an ordinary bicycle, developed while other experimenters were trying to apply the same principle to horseless carriages.

The book has chapters on automobile showmanship, racing, the sex appeal of the automobile, the automobile on the stage and automobile songs and press agency.

Three Managers Go South

The Studebaker Corp. recently appointed three district managers for the South. They are: R. L. Stevens for Dallas, Texas; Alfred Grynchal for Atlanta, and R. D. Skillman for Memphis, Tenn.

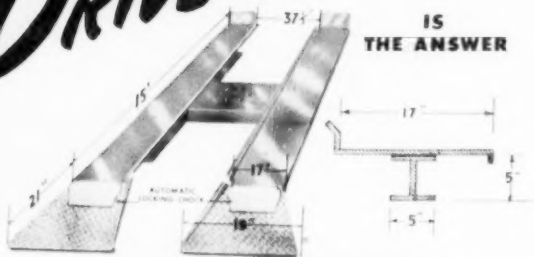
Raleigh Group Elects Marshall

Penn Marshall of C. C. Motor Co. was elected president of the Raleigh, N. C., Automobile Dealers Association last month. Robert Vernon of Robert Vernon, Inc., was elected secretary-treasurer of the group.

SAMSON

DRIVE-ON HOIST

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THE ANSWER



FULL HYDRAULIC OR SEMI-HYDRAULIC



Write or Phone for Catalogue Sheets

SAMSON MANUFACTURING CO.

P.O. BOX 682 FRESNO, CALIFORNIA PH. 2-9386

Kansas City Man Takes High Ford Position

T. J. O'NEILL, formerly district sales manager at Kansas City, has been named manager of the new car sales department, one of two new departments created in a revamping of Ford Motor Co.'s top-level management. O'Neill was for a time at Memphis, Tenn.

Under the new set-up, all sales departments under the direction of Sales Manager Walker A. Williams and L. W. Smead, assistant sales manager, have been regrouped into two divisions.

J. D. Ball has been appointed manager of product sales and service, heading one group, and F. J. McGinnis has been appointed manager of sales staff services.

In addition to the department headed by O'Neill, a sales training department under William C. Scott has also been created.

P. O. Larson, former district sales manager at Dallas, Texas, has been promoted to manager of the truck and fleet sales department, formerly headed by Ball.

The six regional sales managers in the field will continue to report directly to Williams.

C. W. Priesing to Head Dayton Rubber Sales

C. W. Priesing has been appointed vice-president and general sales manager of The Dayton Rubber Co., in charge of coordinating all selling and merchandising activities. He was formerly with the Ansco Division of General Amline and Film Corp. as general sales manager.

Three other vice-presidents of the company have been affected by a realignment of duties to carry out the 1950 sales program.

Irvin Esbrouh, in charge of tire sales, will also be responsible for associated lines, such as repair materials. Leonard C. Strobeck will direct all field selling activities for mechanical lines. Herbert S. Waters will be in charge of merchandising and preparation of products, other than tires, after they have passed the early development stage.

Emerson Heads Washington Dealer Association

W.ILLIAM H. Emerson, president of Emerson and Orme, Inc. (Buick), was elected president of the Washington Automotive Trade Association last month.

Other officers include: A. Leftwich

Sinclair, Jr., first vice-president, Edwin L. Stohman, second vice-president, L. S. Jullien, treasurer, and Fred L. Haller, secretary.

Four new directors were added to the five previously elected: Earle O. Baker, I. A. Peake, Frank Small, Jr., and Frank G. Stewart.

Bonner Dies at Columbia

K. V. Bonner, district service manager at Columbia, S. C., for three divisions of Chrysler Corp., died recently in Columbia.

Belfie Succeeds Tennessean in Buick Sales Position

A. H. BELFIE has been appointed assistant general sales manager for the eastern region of Buick Motor Division, effective March 1. He has worked in many parts of the country for General Motors Corp., including Kansas City and Washington, D. C.

Belfie succeeds H. J. C. Miller, a native of Memphis, Tenn., who is reaching retirement age after being with Buick since 1929.



Don't WISH for more money... MAKE it with HYPRESSURE Jenny STEAM CLEANER

Is profitable business passing you up because you're not equipped to take care of it?

With Hypressure Jenny you can add many "extra-profit" services to your line by doing the jobs car owners need - and want. Jenny brings new customers in, and keeps them coming back.

Hypressure Jenny will clean a car motor "like new", in 15 minutes... rid radiator and front-end grille work of bugs and leaves... cut grease, mud and road dirt from springs, frame and fenders... prepare cars for undercoating, etc. Pay for such services averages \$10 to \$12 an hour.

With combination Hypressure Jenny and Steam Thoro-Purge, you can increase your business as much as \$10,000 a year on cooling system cleaning alone.

And all the while Hypressure Jenny is making you more money it is saving you money too by keeping your equipment, lifts, floors, walls, windows, driveways, lavatories, etc. clean as a pin at only one-tenth the time and cost you now take to clean them by hand.

Don't wish for more money... MAKE it with Hypressure Jenny Steam Cleaner.



Service Master
HYPRESSURE JENNY
STEAM CLEANER
with Steam Thoro-Purge
mounted on cover

Get the complete story in this
FREE BROCHURE - Just 13 pages in
Extra Profit - Write today

HYPRESSURE JENNY DIVISION
HOMESTEAD VALVE MANUFACTURING COMPANY
"Serving Since 1892"
 P. O. BOX 99 CORAOPOLIS, PA.

Jobber News

(Continued from page 85)

Jobbers who want to sponsor the show should make application to the show office, 700 Insurance Building, San Antonio.

Johnson said that practically all exhibits will be staffed with top-flight factory men who will be available to dispense product information and facts about the year's advertising and sales programs.

"In order to get the full story from each manufacturer," said Johnson,

"practically all of the progressive jobbers are taking advantage of the sales conference program by scheduling half-hour conferences with certain exhibitors. Sponsoring jobbers who have not already arranged for conferences should make their schedules with chosen manufacturers so as to be included in the schedule.

"All southwestern jobbers should take advantage of this opportunity to school their men on products being handled. Undoubtedly most of these products will be at the San Antonio show for demonstration."



Alfred E. Keough is now sales manager of the Automotive Parts Division of Hershey Metal Products, Inc. A former president and director of Motor and Equipment Manufacturers Association, Keough is now a member of the advisory committee. He was formerly general manager of the Mobs Division of John T. Stanley Co., Inc.

V. B. Day to Head Tool Institute

V. B. Day, executive vice-president of Bear Manufacturing Co., is now chairman of the executive committee of the Equipment & Tool Institute. He succeeds H. B. Barrett, president of the Barrett Equipment Co.

Other members of the committee for 1950 include: M. W. Buzner, Sr., vice-president of Ameco Tools, Inc.; C. P. Brewster, sales manager of K. D. Manufacturing Co.; M. H. Potter, sales manager of Marquette Manufacturing Co.; H. D. Smith, president of Globe Hosiery Co.; E. P. Stuart, sales manager of Lincoln Engineering Co.; G. H. Freslar, vice-president of The Black & Decker Manufacturing Co.; and Gordon R. Walker, vice-president of Walker Manufacturing Co.

The membership of the institute is composed of 65 manufacturers of equipment and/or tools. Lynn F. Woolman is executive manager, with headquarters in Kalamazoo, Mich.

Kent-Moore Opens New Kansas City Branch

KENT-MOORE Organization, Inc., has opened an enlarged regional branch office at Kansas City. James C. Duval is resident district manager.

Situated at 1915 Main St., the facilities include retail-sales showrooms, a model service area for demonstration and instruction, warehouse space and a fleet of mobile units to assure prompt delivery in the territory.

"Our annual sales meeting for our entire sales force was held during the week between Christmas and January 1," T. C. Garrett, manager of the Automotive Division of The Schoellkopf Co., Dallas, Texas, reported.

Marion Bennett is an addition to the outside sales organization of Mills-Morris Co. at Jackson, Miss.

Mills-Morris Has Series Of Bonus Parties

MORE than 200 employees of Mills-Morris Co., Memphis, Tenn., were given bonus checks and gifts at the annual Christmas party on Dec. 23. Leo R. Jalenak, treasurer, reported.

Similar parties were held at the Mills-Morris stores in Union City and Milan, Tenn.; Jackson, Tupelo and Greenville, Miss.; Jonesboro, Ark. and at Auto Bearings and Parts Co., Nashville, Tenn.

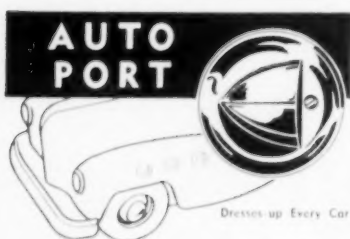
Seven Southerners Join NSPA Ranks

SEVEN southern firms were recently added to the membership roll of National Standard Parts Association.

They are: Charlottesville Auto Parts Corp., Charlottesville, Va.; Garrett Auto Supply, Wichita, Kan.; Moorefield Battery and Parts Co., Charlottesville, Va.; Motor Supply, Inc., Corpus Christi, Texas; Range Auto Parts, Inc., Johnson City, Tenn.; Salisbury Automotive, Inc., Salisbury, Md.; and Wharton and Barnard, Milford, Del.

Franzini Sets Up Firm

Phil Franzini, seven years southwestern division manager for R. M. Hollingshead Corp., has entered business for himself. He will headquarter at 2033 Commerce St., Dallas, Texas. Lines will be announced later.



Sell the Auto Port — new dealers are selling as standard equipment.

Streamlined chrome plated brass and highly polished stainless steel. Easy one screw attachment.

For hood, body or fenders. Eliminates open port holes.

Dealer Price	only \$1.00 set of 6 screws
for Buicks only—	
set of 6 w. brackets	\$1.12
set of 8 w. brackets	\$1.49



8" pneumatic tired UTILITY WHEELS

Sturdy, unpainted, rubberized. Sells everywhere for twice the cost of this wheel.

For toys, carts, wagons, trailers. Hundreds of users. 175 Goodyear Tire

Roller or Dilite bearings. You can't beat the price of this wheel.

Dealer Prices — only 70c dilite bearings, 85c roller bearings

WOOD'S
METAL STAMPING CO.
2342 Yandes St., Indianapolis, Ind.

Here are the NAPA officers for 1950 (l. to r.): President Robert L. Turner of Atlanta, Vice-President J. M. Heffelfinger of Indianapolis and Henry Lansdale of Detroit, who was re-elected vice-president and general manager.



Robert Turner of Atlanta Heads NAPA for 1950

ROBERT L. Turner, president of Gemine Parts Co., Atlanta, was elected president of the National Automotive Parts Association at the recent annual meeting. He succeeds H. A. Bradley, Jr., of Quaker City Motor Parts Co., Philadelphia, Pa.

J. M. Heffelfinger of Bouzer Test Management Service, Indianapolis, Ind., was elected vice-president, succeeding Turner. Henry Lansdale of Detroit was re-elected vice-president and general manager.

In addition to the identification, display and promotional material available to NAPA jobbers for many years, the 1950 program will provide such material for use in repair shops of all kinds, Lansdale said. This material will tie in directly with the association's advertising program and stress the three seasonal services of spring tune-up, vacation service and pre-winter change-over.

Among the directors elected for 1950 is Carlyle Fraser of Gemine Parts Co., Atlanta.

Matt Korshin Heads Sales Of Fredericks Armature

MATT Korshin is now general sales manager of Fredericks Armature Corp., Chicago, Ill. Korshin is a charter member of National Standard Parts Association and Automotive Booster Club. He is a member of the Old-Timers and the Society of Automotive Engineers.

Expansion of the facilities at the Jersey Shore, Pa., plant was also announced by President Leonard Merz.

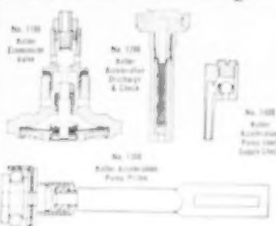
"We recently added the G. A. C. Manufacturing Co. line through Hein-Werner Corp.," Partner William G. Taylor of Taylor Brothers, Richmond, Va., reported.



for Fords, Lincolns, Mercurys



DEALERS, PARTS MEN, SERVICEMEN
Make Money and win Customer Goodwill, installing these Keller Precision-built Carburetor Repair Parts.



You can give your customers amazing new Pep, Improved Performance, Faster Pick-up, Increased Miles per Gallon, by installing Keller Precision-built Carburetor Repair Parts. Thousands now in use—showing impressive results.

Most common causes of poor performance and low gas mileage in regular carburetors are: 1. Excessively leaky fuel jet and fuel valve. 2. Acceleration Pump Discharge Check Valve not set and because it sticks open. 3. Acceleration Pump Piston Linkage broken, worn, misaligned, hardened from corrosion, permitting fuel to escape past piston. 4. Acceleration Inlet Supply Valve Check Valve closed or open and does not allow proper amount of fuel for acceleration discharge.

You can correct these common causes of inefficiency with Keller Precision-built Carburetor Repair Parts. Hundreds of Ford, Lincoln, Mercury dealers from coast to coast have found this not to their profit and to their customers' benefit.

Start giving your customers smoother, peppier, more economical performance—build your profits and customer goodwill. Send coupon for complete information or for a call by our representative.

KELLER RESEARCH CORP.

12727 STOUT ST. DETROIT 23, MICHIGAN

Illustrated is a complete Ford V-8 set. List Price \$310
Ford 8-cylinder set List Price \$200
Mercury, Lincoln and large trucks set List Price \$525

Keller Carburetor Parts do not change the mixture from what F.M.C. knows to be best—they only stop the leaks, increase the efficiency. They correct the common causes of inefficiency by replacing production parts with specially engineered, precision-built parts made of material that will not corrode and are not subject to change due to acids in the fuel. Keller parts give you a Master Automobile—the best a carburetor engine would build for itself.

KELLER RESEARCH CORP.
12727 Stout St.
Detroit 23, Michigan DEPT. J.

I want to know more about Keller Precision-built Carburetor Repair Parts. Send literature and give detailed information ☐ Have your sales representative call ☐

Name _____
Address _____
City _____ State _____

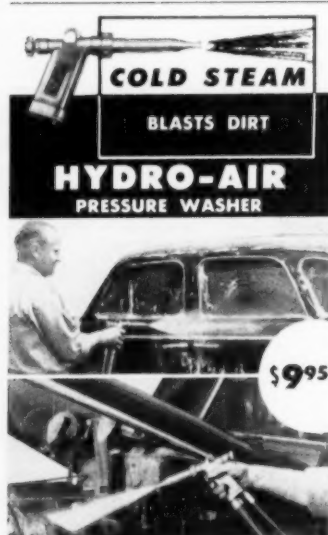
AEA Members Hear 1950 Sales Plans

The annual manufacturers-central distributors conference of the Automotive Electric Association was scheduled for Feb. 10-17 at the Edge-water Beach Hotel in Chicago, S. W. Potter, executive secretary, announced.

The conference provides an opportunity for manufacturers to acquaint their principal distributors with new products and sales-promotion plans, as well as to go over past and future policies.

Feb. 10 and 11 was set aside exclusively for meetings of The Electric Auto-Lite divisions. The annual membership meeting and meetings of the association divisions was planned Feb. 12, with the remainder of the week being devoted to meetings and conferences between manufacturer members and their central distributors. Approximately 550 members are expected to attend the annual conference, Potter said.

"General conditions in our territory are good," J. S. Simmons, Jr., president of Simmons Parts Co., Inc., Staunton, Va., reported.



COLD STEAM
BLASTS DIRT

HYDRO-AIR
PRESSURE WASHER

\$995

Wash cars without boots or apron.
Build Business with a

15-MINUTE CAR WASH
CLEAN MOTORS & PARTS

If your jobber cannot supply you, we will send you one direct, postpaid.

D & M PRODUCTS, INC.

439 S. Western Ave. Los Angeles 5, Calif.

Clements Dies in Roanoke

W. B. Clements, president of W. B. Clements, Inc., Roanoke, Va., died recently of a heart attack. He was 55. Clements had been engaged in the parts business in Roanoke since 1937. Before that time he was in business in Richmond.

Rothenheiser Heads Region

Norman Rothenheiser has been promoted to manager of Region 1 of Perfect Circle Corp., with headquarters in Philadelphia. He was formerly manager of the St. Louis territory.

The Crow-Burlingame Co. Unit of Ozburn, Crow & Yantis Co. recently held a meeting in Little Rock, Ark., for the No. 2 men of the branch stores. Company policies and practices were explained to the 55 attending.

Lawrence Wise of Jacks Auto Parts, Blackwell, Okla., has moved into a new home, built after his house was torn down by a tornado. Although he hopes there won't be a repeat performance, he has a solid concrete basement, ceiling and all, in case there's another windstorm.

"We were recently appointed distributor for the Bear line of front-end equipment," Ned E. Holland of Holland Auto Supply, Inc., Greenville, S. C., reported.

Dwight Feece, manager of The Motor Equipment Co., Bartlesville, Okla., has been passing out cigars recently to celebrate the arrival of Myra Beth, his new daughter.

Cleveland Selects Texas Firm

Hirsig-Frazier Co., Inc., of Dallas, Texas, has been appointed direct factory sales representative for tire chains, tractor chains and tow chains manufactured by The Cleveland Chain & Manufacturing Co. The territory will include Texas, Oklahoma, Arkansas and Louisiana.

Schoellkopf Revamps Layout

The Schoellkopf Co. of Dallas, Texas, has rearranged its automotive department on the main floor. The counter has been moved back to give a larger floor space and extended across the front for better counter service.

W. W. Jones has been added to the city sales department of Mills-Morris Co., Memphis, Tenn., and Bryant Averill has joined the counter sales force.

Billy McCulloch, city salesman for the Texarkana branch of the Crow-Burlingame Co. Unit of Ozburn, Crow & Yantis Co., was married recently to Miss Genevieve Dunham.

The Stevens-Clement Co., Charleston, S. C., recently installed a neon sign to replace a former wooden sign. The building is being repainted.

Plans are underway for a new building for Hilton Brothers Co., Fayetteville, Ark. Friends say it will be a "real layout."

J. S. Locke is now in charge of counter machine shop sales for Mills-Morris Co., Memphis, Tenn.

Shown here at the first sales conference at Spontane Manufacturing Co., steam-cleaner manufacturer of Atlanta, are (l. to r.): Seated, David C. Cody of Richmond, Va.; William F. Buchanan, secretary, and George Leo Hall, president of Spontane; Vale H. Perry of Springfield, Mass., and General Manager W. D. Cochran; standing, William H. Shirley of Matthews, N. C.; Robert M. Stone of Richmond; Spencer E. Butler of Atlanta; Luther T. Cronk of Salem, Va., and Robert H. Robertson of Atlanta.



Elaborate Program Planned For May Regional Meeting

MANAGING officers of five national associations are scheduled to address the regional conference of the Southeast Automotive Show, to be held May 15-16 at the Biltmore Hotel in Atlanta.

These speakers and subjects which have been selected include: B. W. "Whit" Ruark, general manager of Motor and Equipment Wholesalers Association, who will talk on "Manufacturer-Jobber Relations"; Jack Wiggins, executive vice-president of Na-



Mr. Roberts



Mr. Siegal



Mr. Gee

tional Standard Parts Association, R. G. Patterson, executive vice president of Automotive Engine Rebuilders Association, who will speak on "How to Make Money Out of Your Machine Shop"; A. H. Erdholz, general manager of Motor and Equipment Manufacturers Association, who will discuss "National Regional Automotive Shows"; and Lynn Woolman, executive manager of Equipment and Tool Institute, whose subject will be "Special Equipment Selling."

Several other nationally known speakers plan to address the conference. Carl R. Wipperfurth, vice president and sales director of McQuay-Norris Manufacturing Co., will discuss "General Motors' Rebate to Dealers on Wholesale Business."

The "Get It from Your Jobber" program will be presented by Walter A. Kirkpatrick, advertising and sales promotion manager of the Wilkerson Manufacturing Co.

Fred S. Roberts, general manager of Phelps Roberts Corp., Washington, D. C., will talk on "Washington as the Wholesaler sees It."

After each talk there will be an open forum for jobbers to ask questions or make comments on the subjects.

Arnold J. Siegal of Birmingham, Ala., president of the Southeast Auto-

motive Show, will make the welcoming address and will also give details on the 1951 show, scheduled for Birmingham in April, 1951.

A luncheon, social hour and banquet on the opening day will give the southeastern jobbers an opportunity for fun and fellowship.

Harry Gee of Atlanta is chairman of the program committee.

Merritt Heads Clayton Sales Promotion

WILLIAM O. MERRITT has been appointed sales promotion manager for the Clayton Manufacturing Co. He will work with the advertising, training and promotion activities of the El Monte, Calif., firm.

Merritt was formerly with Bear Manufacturing Co., working as public relations, sales promotion and training director.

Shine On, Shine On, License Plates!

Maine's license plates will shine on the highways in 1950. They are being made with "Scotchlite," a reflective material which is said to pick up the headlights of cars 1,200 feet away.

The plates will be made from this material bonded to aluminum and will last five years or more, with date inserts to be changed annually.

State police expect the plates to reduce rear-end collisions, as well as making it easier to follow cars at night.

Recently-elected officers of the Automotive Booster Club of South Texas, No. 30, are shown here. Front row, left to right, are Carl B. Gracely, first vice-president; E. J. Caretto, president, and S. N. Steed, second vice-president. In the back row are J. M. Ravenna, treasurer, and Franklin G. Meek, secretary.





BLAKLEY.

"Er, Mr. Bosco!"

Hill Goes Back to Cherry

Hugh B. Hill has rejoined McEwen Cherry Co., Nashville, Tenn., after several years' absence. He was with the company for many years prior to 1944 and is well known throughout the Southeast. "We plan to have Hill work the Florida territory, effective Feb. 1, succeeding C. E. Fuller, who will act as special sales promotion man throughout the entire territory," Partner J. McEwen Cherry said in the announcement.

D & M Appoints Georgian

Case-Davison-Andres, 47 West Park Square, Marietta, Ga., has been appointed representative in the Southeast for D & M Products, Inc.

Ficken Goes to Georgia

H. C. Ficken is now representative for Champion Spark Plug Co. in the southern Georgia territory. He replaces W. H. Bowman, resigned.

Wylie Axford, who since the war has covered the Alabama, Mississippi and Tennessee area as a manufacturers' agent, has rejoined the John Bean Division as automotive sales manager. "Red," as he was known for many years, originally went with Bean in 1936. For a time he was territory supervisor for the United States and later he was materials expeditor.



Klier Represents Burton In the Southeast

G. W. Klier Co. of Atlanta has been appointed representative for Burton Auto Spring Corp. in Georgia, Florida, Alabama, Mississippi, Tennessee, North and South Carolina and Virginia.

Five representatives will cover the territory on regularly-scheduled calls, Walter Klier said.

A complete warehouse stock of Burton leaf and coil springs has been placed with Parts Manufacturers Service at 338 Peachtree St., N.E., Atlanta, Ga.

C. A. Wagner, formerly with Burton, will cover Georgia and Florida for G. W. Klier Co.

This firm will also represent Regal Tool & Mfg. Co. in Virginia, North and South Carolina, Georgia and Florida.

Cliff Remm Forms Company

Cliff Remm, formerly with Lawrence M. Hirsig and Co. of Jacksonville, Fla., and the C. Guy Keen Co. of Meridian, Miss., has formed the Cliff Remm Co., manufacturers' representatives at Jackson, Miss. The firm will cover Mississippi, Louisiana and Memphis, Tenn., from headquarters at 4663 Kings Highway, Jackson.

Barney Birdsall of Birdsall-Stephens Motor Parts, Enid, Okla., and Mrs. Birdsall recently returned from a vacation trip to the Caribbean. In addition to the usual tourist spots, they visited jobbers in the area and learned how they do business.

"Purchase orders are being examined carefully and buying is being set up on a 45-day turnover basis," Manager Glen H. Day of Cornelius Motor Supply, Inc., Pampa, Texas, reported last month. "Manufacturers allowing return of obsolescent and overstocked merchandise are favored."

"General conditions in our territory are fair," William G. Taylor, Jr., partner in Taylor Brothers, Richmond, Va., reported last month.

FOR SALE — 10 KW ELECTRIC PLANT

Compact unit with engine and generator in stream lined housing. Automatic control, push-button starting 115 230 volt, single phase, 60 cycle, 3 wire generator driven by efficient Willys gasoline engine. Mounted on skids, complete with remote switches, wire and tools. Operated only 500 hours before replaced with power line service.

Suited for industrial, commercial, construction or agricultural use. Ideal for stand-by service. Will sell at \$900, which is less than half its initial cost. Address Box 143, c/o SOUTHERN AUTOMOTIVE JOURNAL 806 Peachtree St., N. E., Atlanta 5, Ga.

SEEMS EVEN CUPID KNOWS I'VE GOT
SOUTHERN FIBER BLOCK

SOUTHERN
FRICTION MATERIALS CO.-CHARLOTTE, N.C.

Callanan Becomes President Of Walker Brothers

ANTHONY M. Callanan, former vice-president and general manager, is now president of Walker Brothers, Conshohocken, Pa. He succeeds Herve S. Walker, president of the firm since 1912, who has been elected to the new position of chairman of the board.

Callanan has been in the electrical business for 40 years and has been with Walker since 1921.

Other new officers elected at the annual meeting are: H. Newton Walker, II, vice-president; C. A. Dougherty, assistant treasurer, and Rhoda M. Drayer, assistant secretary.

Branson Heads Amko Sales

Harry P. Branson is now sales manager and assistant to the president of Automotive Manufacturing Co., President Nuemon Katz announced recently. Branson was formerly with Lamar Pump Co.

Williams Advances Pontius

A. C. Pontius has been advanced to assistant manager of the Automotive Tools Division of J. H. Williams & Co. He joined Williams in 1926 as an office boy.

Exide Advances Norberg

Carl F. Norberg has been elected executive vice-president of The Electric Storage Battery Co. He had been vice-president in charge of manufacturing since 1944.

Road Damage from Weight Studied in Maryland

A TWO-LANE stretch of reinforced concrete pavement on U. S. 301 near LaPlata, Md., may soon be used to determine the effect of heavy truck usage on highways.

The experimental roadway will be divided into two sections of .5 mile and .6 mile, making four lanes available. Each lane of each section will be subjected to axle weights of only one type.

Each truck will pass over its test lane about 500 times a day, or the equivalent of 20 years' truck use in six months, according to the Bureau of Public Roads and the Highway Research Board, sponsors of the project. The tests are scheduled to begin around April 1.

Speaker Buys Amacor Line

J. W. Speaker Corp. of Milwaukee, Wis., has acquired the complete Amacor line of automotive rear view mirrors and directional signals. The line was formerly manufactured by the Ajax Manufacturing Corp. of Detroit, Mich. The units will now be marketed under the tradename "Speaker Amacor."

Rotary Lift Ups Robinson

Allan Robinson is now vice-president in charge of the Automotive Division of Rotary Lift Co., Memphis, Tenn. Robinson, who practiced law in Memphis from 1925 to 1945, had been sales manager of the Auto Lift Division since 1948.

This eye-catching billboard ad, to be used throughout the country, was one of the features of the merchandising campaign of Fram Corp. presented to distributors at a recent six-day sales meeting. Among the distributors pictured with officials of the company are: J. J. Dillon and C. H. O'Rielly of Joplin, Mo.; J. C. Rigney of Lubbock, Texas; E. J. McKee of St. Louis, Mo.; O. A. Carter and H. T. Biar of Dallas, Texas; A. C. Suhren of New Orleans, La.; J. L. Stevens of Tampa, Fla.; Ira Dimmick, Sr., of Lake Charles, La.; W. W. Hawman of St. Joseph, Mo.; S. G. Purvay of Tulsa, Okla.; Frank Ellis of Fort Worth, Texas, and Ed Younes and Henry Parater of Washington, D. C.



Preferred by
over 66,000
body shops

THE INDUSTRY'S
No. 1 METAL FILLER



Yes, the trade's preferred permanent surface solder is Kwik Metal... the 100% answer to easier, low-cost metal repair work. Eliminates the need for complicated welding. No heat, no flame, waterproof, rustproof, shrinkproof. Unconditionally guaranteed!



KWIK-PATCH KITS

Here is the perfect combination for large-area patching jobs. 3 profitable sizes: \$1.25, \$5.25 and Economy \$13.00.

SEE YOUR JOBBER OR WRITE KWIK-METAL DIVISION
ATOMIZED MATERIALS CO.

2002 Major Bldg. Pittsburgh, Pa.

*"You are Safe with any product
bearing the Southern Deluxe label"*

Generators



Starter Motors

AND NOW

**PRESSURE ASSEMBLIES • CLUTCH PLATES
FORD DISTRIBUTORS • STARTER DRIVES
CARBURETORS**

(FORD, CHEVROLET & PLYMOUTH)

ALL carrying the SOUTHERN DE LUXE Label

One source of supply for all of your Rebuilt items — all backed by twenty years of experience in building quality products — twenty years of integrity

Distributed exclusively through Jobbing Outlets.

**IF
YOU ARE
INTERESTED**

In having one source of supply for all your Rebuilt items.

In handling Trade Marked Products sold exclusively through Jobbers.

In handling quality products — competitively priced.

Write us and we will be glad to have our representative call and give you full particulars on our Exclusive Sales Franchise.

SOUTHERN ARMATURE WORKS

3645—10th Ave., North

BIRMINGHAM, ALA.

Wholesale Jobbers Only
PHONE OR WIRE US COLLECT FOR
WIPING CLOTHS AND
WIPING WASTE

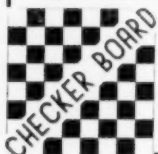
Phone Riverside 9801

CHECKER BOARD

**ALL GRADES OF WIPING
AND POLISHING CLOTHS**

**SOUTHERN WASTE
MATERIAL CO., Inc.**

2817 Taylor St. Dallas 1, Texas



SAVE A TEAR-DOWN JOB



**WONDER
SEAL**

repairs
**CRACKED BLOCKS
CYLINDERS
VALVE PORTS**



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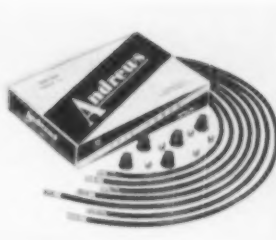
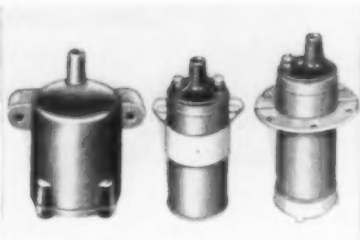
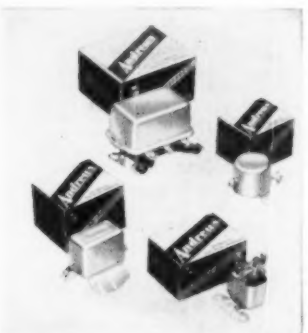
Quick Acting. It works in 30 minutes.
Easy to use! No special equipment or
training needed. Write for folder.
Often imitated. Never Equaled.

**A WONDERWELD PRODUCT
MILLER MFG. CO.
DEPT. SA • CAMDEN, N. J.**

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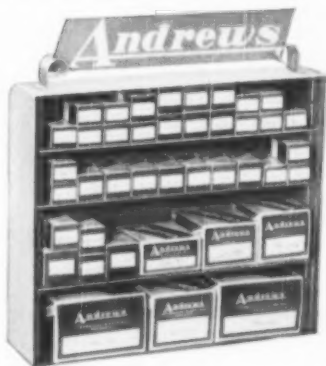


PACKAGED PROFITS in Andrews CABINET MERCHANDISERS

These attractive, colorful, metal merchandising cabinets stocked with Andrews full-quality, fast-moving ignition parts and cables help you give better service.

Customer Satisfaction Since 1921

Andrews
MANUFACTURING CO.
ST. LOUIS, MO.



GIVE 'EM A QUICK START
... Better Mileage ... Smooth Performance

Get DIXI-LUBE
(Not a Motor Oil—A Super Lubricant)

Does Not Evaporate

Simply add it to Motor oil and gasoline

DIXI LUBE is a friction proofing, super-lubricant that cleans out motors and keeps them clear of gum and sludge. Your customers will notice the difference — immediately! No carburetor adjustment necessary after Tune-up ... **DIXI-LUBE does not evaporate!** It's good business to wake up sluggish motors with DIXI LUBE — and it's profitable!

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Order from your
favorite oil dealer or write:
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CO., INC.
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N. 4th Street
Memphis, Tenn.

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"D-Day for Motors" can be victory day for you, too! Ask us about this special advertising sales introductory plan for your territory.

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N. E. M. Parts Warehouse, Inc., 211 E. 4th St., Charlotte, N. C. 1220 W. Adams St., Jacksonville, Fla.

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HAND CHOKE ADAPTER



Inexpensively converts troublesome automatic chokes to a smooth hand choke operation in a jiffy.

More profit to you from the only complete hand-choke adapter kit on the market.

U.S. and Canadian Patent Pending

* Easily, quickly attached with only a screw driver

* Tens of thousands already installed without a single complaint or return

* Write for complete catalog

* Fully guaranteed on a money-back basis

* Every REDEX kit contains complete parts (including control wire)

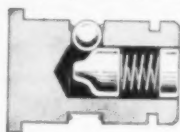
At your local parts jobber or write to:

AMERICAN MUFFLER CO.

1280 TREMONT ST., BOSTON 20, MASS.

Warehouses: Seattle, San Francisco, Los Angeles, Dallas and Toronto, Canada

SOUTHERN AUTOMOTIVE JOURNAL for FEBRUARY, 1950



*Here's all
you need*

to put

TOP PERFORMANCE IN CHEVROLET BRAKES!

Every Chevrolet brake job you do will result in smoother brake action . . . better brake efficiency . . . and complete customer satisfaction when you install the new Floato Brake Energizer for Chevrolet!

The Floato Brake fits all Chevrolet models 1936 through 1949. It is selfcentering, self energizing and applies even pressure to all shoes. Installed in an instant without drilling, cutting or re-working the brake mechanism. **SOLD THROUGH JOBBERS ONLY**—for list prices, catalog sheets, and full details, write

Boyle Distributing Co.

950 SOUTH BOYLE AVE.
LOS ANGELES 23, CALIF.

HOLFAST



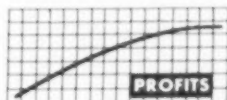
BELTS • HOSE

*When you sell Extra Quality
you make Extra Profits!*

HOLFAST RUBBER COMPANY
Atlanta, Georgia

DISTRIBUTORS!

EXCLUSIVE DISTRIBUTION
for HIGH PROFITS
in a buyer's market



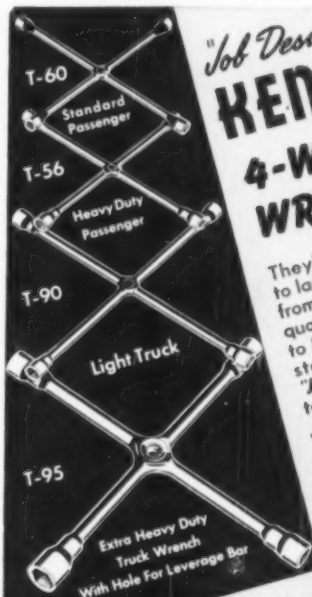
Emphasizing the profitable features of automotive paint distribution, the American Lacquer Solvent Company franchise



works to the distributor's advantage. Small inventory and rapid turnover are but part of an eight point program designed for success. The Coloramie Precision Matcher brings a new degree of exactness to color mixing that increases business, minimizes overhead. Learn the whole story.

Write or Wire Today

AMERICAN LACQUER SOLVENTS COMPANY
PERKIOMEN JUNCTION, PHOENIXVILLE, PA.



"Job Designed"
KEN-TOOL
4-WAY RIM WRENCHES

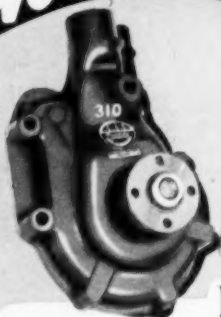
They're built stronger to last longer . . . forged from only the highest quality steel . . . held to KEN-TOOL'S rigid standards. They're "Job Designed" to do tough jobs quicker . . . **Best by Test!**

See KEN-TOOL'S Complete Line At Your Jobber!

The KEN-TOOL Mfg. Co.
Akron 5, Ohio

Largest Exclusive Manufacturers of Tire and Wheel Changing Tools

NOW A WRITTEN
GUARANTEE
WITH EVERY
AMKO
WATER
PUMP



Guarantee.

NEW DESIGN
CONSTRUCTION
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AMKO Pumps are Tops in Quality. New Design with New, Improved construction methods and Precision Engineering under exacting supervision in our own plant enable us to give this written Guarantee with every pump to protect your customers.

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ALL PRODUCTS SOLD THRU JOBBERS ONLY

AUTOMOTIVE MAN'G. Co., Inc.
General Offices and Warehouse
570 W. PULTON ST. CHICAGO 6, ILL.



The two STIMSONITE Jewels give an added safety factor — when parked or when tail lights fail.

The Rocket Glo tube is sturdily made of No. 18 gauge wall tubing finished with the famous Richlite Triple Plate. Made with a universal clamp — fits all cars. Catalog sheet on request.

No. 318 Complete with attaching bolt & nut

Richlite MANUFACTURING COMPANY
2374 INDIANA AVENUE • CHICAGO 16, ILLINOIS

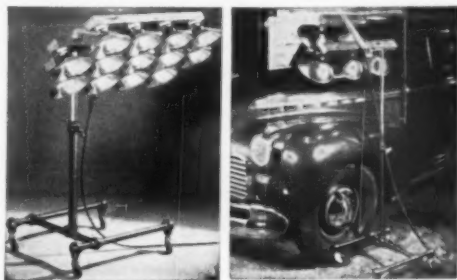
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MORE JOBS... MORE PROFIT!

Dry with NALCO INFRA-RED DRITHERM Portable Units



Here's what NALCO units can do for you—in 15 minutes!

- Entire fender jobs of synthetic enamel dried, ready for polishing
- Putty glaze dried
- Color coats dried hard for polishing

Eliminate the "drying bottlenecks" in your shop—with efficient NALCO carbon filament portable infra-red units. By cutting drying time to a fraction, they save you valuable time and drying space—boost profits by enabling you to handle more jobs!

NALCO units are available in pairs, groups or banks and for tunnels. Write for your free copy of "Faster, More Profitable Auto Refinishing"

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NORTH AMERICAN
Electric Lamp Co.

1074 Tyler St.

St. Louis 6, Mo.

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CLARIDGE

Preferred, always, by experienced travelers because of its many outstanding advantages. Conveniently located in the heart of St. Louis, only two short blocks from the Union Station and right in the center of the Wholesale District... Attractive rooms, each with private bath and shower and circulating ice water... Superior accommodations at economical rates... Visit our beautiful Marine Dining Room for excellent food, moderately priced.

350 ROOMS from \$2.75

FREE PARKING

LOCUST AT EIGHTEENTH

ST. LOUIS MISSOURI



MOPSY

GEE, THERE ARE SOME HOT NUMBERS IN THIS BOOK! *



★ Be sure you have your copy of the *New Belden Catalog*.

Belden
Automotive **WIRE**

HENDERSON TIRE CHANGER FOR 1950

(Formerly known as the Henderson MODERN Tire Changer)

includes these
NEW FEATURES!



PATENT 1,403,249-256
U.S. AND FOREIGN
PAT. PENDING
(\$165.00 cost of Rocker)

\$150.00

Lightning fast lock adjustment on Extensible Upper Breaker. New Bead Lip feature on Mounting Blade prevents tool climbing. Improves mounting on broad-based wheels. Now has broad hardened rim-bearing plate.

No other machine or technique can equal the Henderson 1950 Tire Changer in the speed, safety, and efficiency with which it changes passenger car tires!

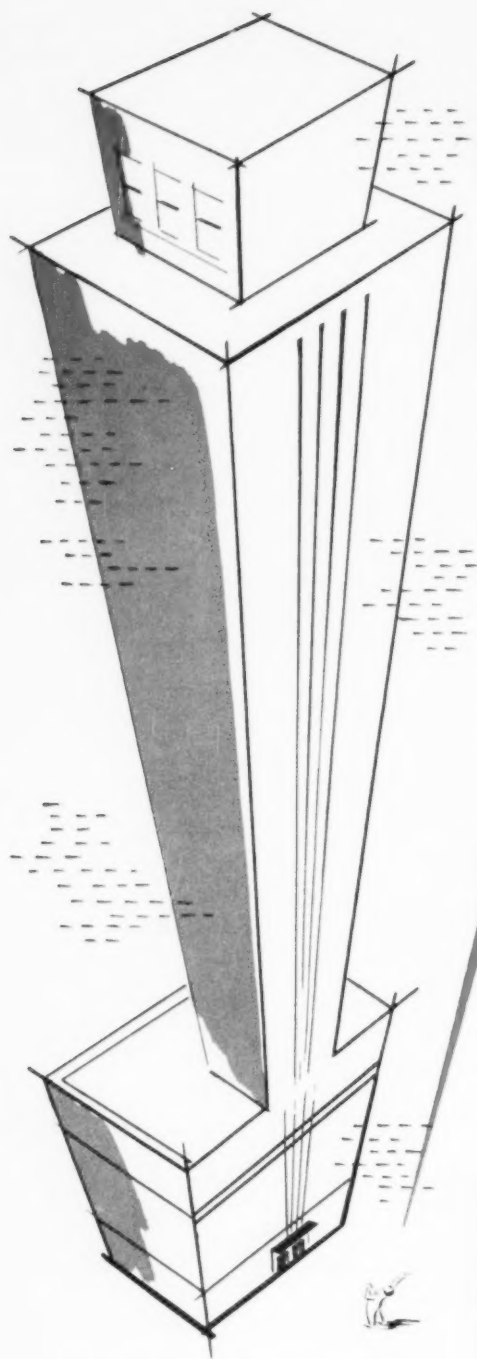
MODERNIZE YOUR OLDER MODEL!

All older model Henderson Tire Changers can be inexpensively modernized to equal the 1950 Model... in twenty minutes. Earlier Extensible Bead Breakers can be exchanged at a minimum cost.

Send for Parts Price Catalogue, and give the serial number of your machine when writing.

BIG FOUR INDUSTRIES, Inc.
HENDERSON TIRE CHANGER DIVISION

1938 Carthage Ave. Cincinnati 12, O.
Canadian Distributor: CANADA VULCANIZER and Equipment Co., Ltd.,
P.O. Box 7, London, Canada © Big Four Industries, Inc., 1949



THE ADVERTISING COUNCIL, INC.
A non-profit organization representing all phases of advertising
dedicated to the use of advertising in public service.
25 West 43rd St., New York 19, N. Y.

GOSH

it wasn't even
here this morning

Now, wait a minute! That's going a little too far. Maybe we do perform industrial miracles in this America of ours, but we haven't gotten around to putting up skyscrapers in *one* working day—not yet anyhow. But we're doing things almost as miraculous as that.

Automobiles, radios, television sets, washing machines and so many other wonderful things are pouring off our production lines by the thousands—daily.

Never before in the history of the world have so many labor-saving, time-saving, miracle-working devices been made for the comfort and convenience of any people.

How do we do it? Easy!

We do it simply by a unique combination of qualities that make our nation the most productive of any country on earth. We do it with a system built on our solid faith and belief in the dignity of the individual.

We haven't reached a state of perfection yet. We probably never shall. But we've been getting better and better and better all the time. While we've been making all of these wonderful things, we've been working progressively shorter hours, earning more money, living better and decreasing the cost of production so that prices can go down.

Our American system is the best, the most thrilling, ever devised. With even better teamwork, the future is unlimited. If you want to help make that future, join with The Advertising Council in explaining the American economic system to your employees.

Order copies of the booklet "The Miracle of America" which explains clearly and simply how a still better living can be had for all if we all work together. See that each of your employees receives one of these copies.

Let's show the world what Americans can do when they really try.



WANT TO HELP? MAIL THIS

The Advertising Council, Inc. Dept. B
25 West 43rd St., New York 19, N. Y.

Please send me prices on _____ copies of "The Miracle of America", so that each of my employees may receive one.

Name _____

Company _____

Address _____

I COLD HORSEPOWER needs help



CASITE
IN THE CRANKCASE
GUARANTEES
QUICK STARTING

LIST PRICE 75¢

- Quick starting for your customers—quick profits for you!

Casite in the crankcase retards congealing of oil, lets the motor spin over and start, even in sub-zero temperatures.

Casite through the carburetor air-intake conditions engine for winter driving, frees sticky valves, rings.

drouT
IN THE GAS TANK
PREVENTS GAS-LINE
FREEZE-UP

LIST PRICE 75¢



- Now you can give your customers guaranteed protection against gas-line freeze-ups.

A can of drouT keeps moisture out of the gas tank, keeps ice out of the gas-line.

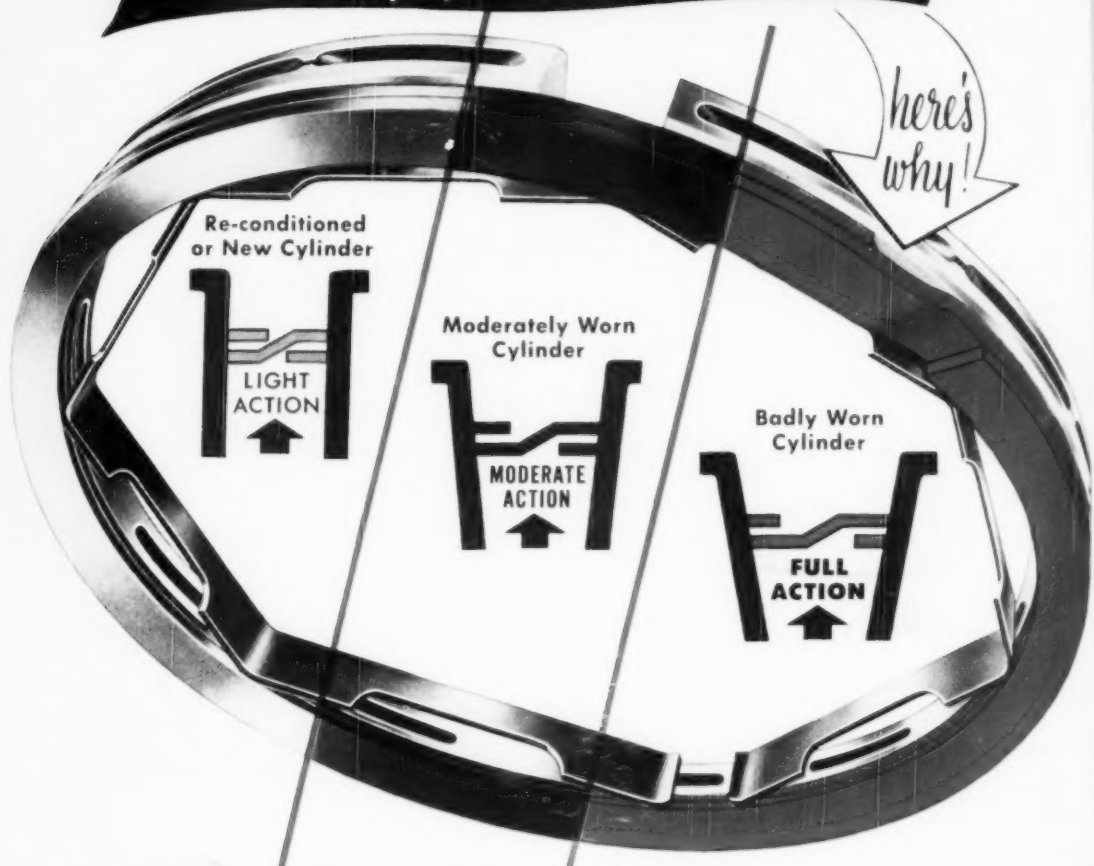
drouT changes moisture into a non-freezing, combustible mixture, drouT also keeps fuel system, carburetor jets clean, free-running, efficient.

THE CASITE CORPORATION • HASTINGS, MICHIGAN

**TWO GREAT COLD-WEATHER BEST-SELLERS BACKED BY
Double-Your-Money-Back Guarantees**

AUTOMATICALLY ADAPTS ITSELF
...to every cylinder condition

here's why!



Unique, Patented Ramco Spiro-Seal Changes Action Automatically!

Spiro Seal is the No. 1 reason why Ramco 10-Up Ring Combinations are *genuinely All-Purpose* in application. One look at the Ramco 10-Up Oil Ring with Spiro-Seal will tell you that here is a ring truly different. That difference... that *continuous* steel spiral ring... has an action that is unique! It delivers **FULL ACTION** when cylinder walls require it... yet is practically **ACTION-less** when installed in a new or re-bored cylinder.

So you are always safe when you Re-Power with 10-Up. No matter what the condition of the cylinders, you are sure to do the job right. Proof is that any Ramco Re-Powering Job can be guaranteed both as to **RINGS** and **LABOR** for 10,000 and Up Miles. That's why they're known everywhere as 10-Ups!! See your Ramsey Jobber and install a set in your next job. Ramsey Corporation, St. Louis, Missouri.

RAMCO
RE-POWER
STATION

POST
Colliers

Year after Year, Better and Better, Yet, **UNCHANGED IN BASIC DESIGN** Since Originated by Ramco Many Years Ago.

RAMCO 10up

ALL-PURPOSE PISTON RINGS

Unchanged except for the Better through continuous engineering perfection of detail. No obsolescence loss or risk of performance disappointment due to frequent design changes.